

REVIEW AND APPROVALS

POTOMAC RIVER NATIONAL WILDLIFE REFUGE COMPLEX

ELIZABETH HARTWELL MASON NECK NATIONAL WILDLIFE REFUGE

Lorton, Virginia

OCCOQUAN BAY NATIONAL WILDLIFE REFUGE

Woodbridge, Virginia

FEATHERSTONE NATIONAL WILDLIFE REFUGE

Woodbridge, Virginia

ANNUAL NARRATIVE REPORT

Fiscal Years 2007 – 2008

_____ Refuge Manager	_____ Date
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_____ Refuge Supervisor – South Review	_____ Date
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_____ Regional Office Approval	_____ Date
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POTOMAC RIVER NATIONAL WILDLIFE REFUGE COMPLEX

Woodbridge, Virginia

INTRODUCTION

In 1998, Elizabeth Hartwell Mason Neck National Wildlife Refuge, Occoquan Bay National Wildlife Refuge, and Featherstone National Wildlife Refuge, were reorganized into the Potomac River National Wildlife Refuge Complex. Reasons for the reorganization were the realization that Occoquan Bay NWR (National Wildlife Refuge) rivaled Elizabeth Hartwell Mason Neck NWR in complexity and to better apportion staff and resources to the needs of the three refuges. All three refuges border Occoquan Bay at the junction of the Fairfax County and Prince William County. Elizabeth Hartwell Mason Neck NWR (on the northeast side of the bay) is the oldest refuge, being established in 1969 and the largest at 2,227 acres. As the first national wildlife refuge specifically established under the Endangered Species Act for bald eagles, its focus is on forest, marsh, and riverine habitat important to the bald eagle. On the southwest side of Occoquan Bay is Featherstone NWR, 325 acres of marsh and riverine habitat important to both waterfowl and eagles. Occoquan Bay NWR is on the west edge of the bay between the other two refuges and is the most recently established of the three. It was established in 1998 as a combination of land previously acquired as Marumsco NWR and recently acquired military surplus lands to form the new 640 acre refuge. Its primary values are the extensive grasslands interspersed with marshes and early successional shrub and forest areas with value to neotropical migrants and grassland dependent species.

The office for the complex is located in Woodbridge, Virginia, about 9 miles from Elizabeth Hartwell Mason Neck and a mile from Occoquan Bay and Featherstone Refuges. The office is a store front managed rental space in a small strip mall.



ELIZABETH HARTWELL MASON NECK NATIONAL WILDLIFE REFUGE
Mason Neck, Virginia

INTRODUCTION

Elizabeth Hartwell Mason Neck National Wildlife Refuge is located in Virginia, 18 miles south of Washington, D.C. Nestled on an 8,000 acre boot-shaped peninsula jutting out into the Potomac River; the refuge is dominated by mixed hardwood and pine forests, high bluffs, and about 300 acres of freshwater marshes. From the initial acquisition of 845 acres in 1969, Mason Neck has grown to 2,277 acres, including 7789 acres leased in 1982 from the Northern Virginia Regional Park Authority. Until 1974, the Mason Neck National Wildlife Refuge was a subunit of Blackwater National Wildlife Refuge, based out of Cambridge, Maryland. Mason Neck then became an independent unit with a manager and two subunits of its own, Featherstone NWR and Marumsco NWR (which later became Occoquan Bay NWR).

The refuge was established in 1969 as the Nation's first bald eagle refuge using funds provided under the Endangered Species Act. Eagles nested and wintered on the peninsula as far back as colonial times but in the 1950's and 1960's, succumbed to development and pesticides. With greater awareness, better protection nationally and regionally of the birds and their habitat, and reduction in pollution, the eagle population has been making a recovery. In 1999, there were 3 eagle nest sites on the refuge, one on the adjacent state park, one on the adjacent Gunston Hall Plantation, and two on private lands elsewhere on the peninsula. In an expanding ring, there are at least 3 more nests within a five mile radius on the Virginia side of the Potomac River and reports of several more nests on neighboring Maryland lands.

Although the refuge is located within driving distance of approximately 10 million residents of Virginia, Maryland, and Washington, D.C., the refuge's annual visitation is only around 20,000 people. Low visitation may be due to the limited amount of public use facilities or the fact that there are over 400 nearby Federal, state, regional, county and community parks. On the Mason Neck peninsula alone, the refuge is bordered by the Bureau of Land Management, Mason Neck State Park, Gunston Hall Plantation, and Pohick Bay Regional Park. Together in a loose association entitled the Mason Neck Management Area, the federal, state, and regional government agencies can share manpower and material resources and minimize duplication of effort by coordinating recreational activities. Each agency can focus on its strengths of general recreation, outdoor or wildlife dependent recreation, resource protection, and historical interpretation. Collectively the Mason Neck Management Area ensures that the public has the opportunity to enjoy a variety of activities without diminishing the purposes for which we were all created.

On August 14, 2006 the refuge name was officially changed to "Elizabeth Hartwell Mason Neck National Wildlife Refuge" to honor the significant contributions to conservation by Elizabeth Hartwell. Ms. Hartwell, a resident of Mason Neck and a conservation activist, spearheaded the movement to protect habitat on the Mason Neck peninsula.

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A. HIGHLIGHTS



B. CLIMATIC CONDITIONS

U.S. Department of Commerce
National Oceanic & Atmospheric Administration

ANNUAL CLIMATOLOGICAL SUMMARY (2007)

National Climatic Data Center
Federal Building
151 Patton Avenue
Asheville, North Carolina 28801

Station: **448906/13743, WASHINGTON REAGAN AP, Virginia**

Elev. 10 ft. above sea level

Lat. 38°51'N, Lon. 77°02'W

Temperature (° F)														Precipitation (inches)									
MMXT	MMNT	MNTM	DPNT	HTDD	CLDD	EMXT		EMNP		DT90	DX32	DT32	DT00	TPCP	DPNP	EMXP		TSNW	MXSD		DP01	DP02	
Mean Max.	Mean Min.	Mean	Depart. from Normal	Heating Degree Days	Cooling Degree Days	Highest	High Date	Lowest	Low Date	Number of Days				Total	Depart. from Normal	Greatest Observed		Snow, Sleet			Number		
										Max >=90°	Max <=32°	Min <=32°	Min <=0°			Day	Date	Total Fall	Max Depth	Max Date	>=.10	>=.11	
48.2	33.2	40.7	5.8	746	0	73	6	15	26	0	1	20	0	2.46	-0.75	1.03	1	1.3	1	22	5		
38.1	23.6	30.9	-7.2	950	0	59	22	10	6	0	6	25	0	2.22	-0.41	0.89	14	5.9	3	26	4		
58.0	37.4	47.7	1.2	535	5	83	27	20	8	0	1	10	0	3.19	-0.41	1.79	16	1.9	1	8	5		
62.6	44.6	53.6	-2.5	353	19	86	30	29	8	0	0	3	0	4.17	1.40	2.41	15	0.4	0T	7	6		
77.6	58.0	67.8	2.2	53	150	91	26	44	8	1	0	0	0	1.75	-2.07	0.93	12	0.0	0		3		
85.0	67.2	76.1	1.6	0	341	96	27	59	23	7	0	0	0	1.38	-1.75	0.88	3	0.0	0		3		
88.8	69.7	79.3	0.1	0	451	98	10	62	2	14	0	0	0	2.40	-1.26	0.98	29	0.0	0		4		
88.3	71.1	79.7	2.3	0	462	102	8	63	22	15	0	0	0	3.47	0.03	1.46	21	0.0	0		6		
82.3	63.5	72.9	2.4	10	254	91	4	50	17	4	0	0	0	0.60	-3.19	0.41	10	0.0	0		2		
76.4	57.7	67.1	8.3	74	146	94	9	41	30	3	0	0	0	6.55	3.33	2.65	26	0.0	0		5		
57.7	41.8	49.8	1.1	451	0	77	22	30	24	0	0	1	0	1.46	-1.57	0.80	15	0.0	0		3		
47.7	35.9	41.8	2.3	713	0	64	23	23	6	0	0	7	0	3.28	0.23	0.72	16	2.6	3	6	11		
67.6	50.3	58.9	1.5	3885	1828	102	Aug	10	Feb	44	8	66	0	32.93	-6.42	2.65	Oct	12.1	3	Dec	57		

Notes

(blank) Not reported.

+ Occurred on one or more previous dates during the month. The date in the Date field is the last day of occurrence. Used through December 1983 only.

A Accumulated amount. This value is a total that may include data from a previous month or months or year (for annual value).

B Adjusted Total. Monthly value totals based on proportional available data across the entire month.

E An estimated monthly or annual total.

X Monthly means or totals based on incomplete time series. 1 to 9 days are missing. Annual means or totals include one or more months which had 1 to 9 days that were missing.

M Used to indicate data element missing.

T Trace of precipitation, snowfall, or snowdepth. The precipitation data value will = zero.

Elem- Element Types are included to provide cross-reference for users of the > NCDC CDO System.

Station Station is identified by: CoopID/WBAN, Station Name, State.

S Precipitation amount is continuing to be accumulated. Total will be included in a subsequent monthly or yearly value. Example: Days 1-20 had 1.35 inches of precipitation, then a period of accumulation began. The element TPCP would then be 00135S and the total accumulated amount value appears in a subsequent monthly value. If TPCP = "M" there was no precipitation measured during the month. Flag is set to "S" and the total accumulated amount appears in a subsequent monthly value.

ANNUAL CLIMATOLOGICAL SUMMARY (2008)

National Climatic Data Center
Federal Building
151 Patton Avenue
Asheville, North Carolina 28801

Station: **448906/13743, WASHINGTON REAGAN AP, Virginia**

Elev. 10 ft. above sea level

Lat. 38°51'N, Lon. 77°02'W

Date	Temperature (° F)														Precipitation (inches)											
Elem->	MMXT	MMNT	MNTM	DPNT	HTDD	CLDD	EMXT		EMNP		DT90	DX32	DT32	DT00	TPCP	DPNP	EMXP		TSNW	MXSD		DP01	DP05	DP10		
2008 Month	Mean Max.	Mean Min.	Mean	Depart. from Normal	Heating Degree Days	Cooling Degree Days	Highest	High Date	Lowest	Low Date	Number of Days				Total	Depart. from Normal	Greatest Observed		Snow, Sleet			Number of Days				
											Max ≥90°	Max ≤32°	Min ≤32°	Min ≤0°			Day	Date	Total Fall	Max Depth	Max Date	≥.10	≥.50	≥1.0		
1	47.6	32.4	40.0	5.1	769	0	73	8	18	21	0	1	15	0	1.37	-1.84	0.75	17	1.3	1	18	4	1	0		
2	49.6	32.4	41.0	2.9	688	0	74	18	16	11	0	1	16	0	4.17	1.54	2.05	1	1.0	1	21	6	2	2		
3	58.3	39.7	49.0	2.5	487	0	74	28	29	9	0	0	2	0	2.80	-0.80	0.59	7	0.0	0		6	3	0		
4	67.5	50.2	58.9	2.8	204	29	85	18	40	3	0	0	0	0	4.92	2.15	1.40	20	0.0	0		8	4	1		
5	74.3	55.1	64.7	-0.9	67	65	87	31	48	13	0	0	0	0	10.66	6.84	2.63	11	0.0	0		9	7	5		
6	87.2	68.5	77.9	3.4	0	394	98	7	58	18	8	0	0	0	4.80	1.67	1.49	4	0.0T	0T	11	9	4	1		
7	89.5	72.0	80.8	1.6	0	495	96	21	65	1	14	0	0	0	3.60	-0.06	1.09	23	0.0	0		5	4	1		
8	86.6	69.1	77.9	0.5	0	406	94	19	64	12	7	0	0	0	1.23	-2.21	0.48	28	0.0T	0T		5	0	0		
9	81.9	66.0	74.0	3.5	2	280	95	4	56	21	6	0	0	0	6.41	2.62	3.50	6	0.0	0		8	3	1		
10	67.7	50.0	58.9	0.1	225	44	82	16	36	31	0	0	0	0	1.13	-2.09	0.84	25	0.0	0		2	1	0		
11	53.2	40.0	46.6	-2.1	543	0	74	15	26	22	0	0	9	0	2.43	-0.60	0.76	13	0.0T	0T	18	3	3	0		
12	47.9	32.6	40.3	0.8	759	0	70	28	16	22	0	1	15	0	2.97	-0.08	1.66	11	0.0T	0T	7	5	1	1		
Annual	67.6	50.7	59.2	1.7	3744	1713	98	Jun	16	Dec	35	3	57	0	46.49	7.14	3.50	Sep	2.3	1	Feb	70	33	12		

C. LAND ACQUISITION

1. Fee Title – Nothing to Report
2. Easements – Nothing to Report
3. Other – Nothing to Report

D. PLANNING

1. Master Plan

The planning process and drafting of the official Comprehensive Conservation Plan for Mason Neck began in January of 2007 with key representatives from the State Park, Region, State agencies and the Friends of the Potomac River Refuges attending and providing input. Dates for future planning meetings, drafting sessions, in-house work sessions and public meetings were scheduled. The planning process and meeting dates and contact information was posted on bulletin boards at Mason Neck and Occoquan on March 8, 2007. A public meeting was held on March 27, 2007 at the Chinn Library in Woodbridge for comment on the Featherstone comprehensive plan and a meeting took place on March 28 at the Gunston Elementary School for the gathering of comments and the presentation of information on the Mason Neck plan. Twenty-eight people attended the Featherstone meeting and sixteen people attended the Mason Neck meeting. The specific planning process involved much time by the staff to assess the course that the refuge would move towards in the realm of public use and biology. Julie Study, Visitor Services Specialist and Bill Jones, Park Ranger at Prime Hook, visited the refuge to provide insight into visitor services planning and needs. A discussion of the expansion and rehabilitation of the Woodmarsh Trail were included in the draft document. A proposal to provide visitor access along Sycamore Point Road as far as the Potomac was included. Compatibility determinations were drafted for all current uses as well as for proposed uses. The entire process, which will be completed some time in fiscal year 2009 or 2010, was challenging and informative.

2. Management Plan – Nothing to Report
3. Public Participation – Nothing to Report
4. Compliance with Environmental Mandates – Nothing to Report
5. Research and Investigations – Nothing to Report
6. Other - Nothing to Report

E. ADMINISTRATION

1. Personnel

- Greg Weiler, Refuge Manager, GS-13, EOD 11/23/97 from WASO Arlington VA, PFT

- Daffny J. Hoskie, Deputy Refuge Manager, GS-11, EOD 11/16/03 from Back Bay NWR Virginia Beach VA, PFT, GS-11 effective 06/12/05
- Stacie Allison, Administrative Assistant, GS-7, EOD 8/10/03, PFT
- Marty McClevey, Outdoor Recreation Planner, GS-9, EOD 1/17/99 from NPS, PFT GS – 9 effective 08/21/05
- Steve Boska, Maintenance Worker, WG-10, EOD 8/26/90, PFT, WG-10 effective 09/18/05
- Gareth Williams, Refuge Officer, GS-9, EOD 2/19/06, PFT
- Michael Murray, Visitor Services Intern, 5/15/05 through 8/13/05

Meetings and Travel Sessions for refuge personnel not listed elsewhere:

July 28 – October 25, 2006	FTEP Law Enforcement Officer Training Suffolk, VA; Williams
October 15-27, 2006	Computer Support for Field Stations Basic Course National Conservation Training Center (NCTC); Allison
October 30-31, 2006	Avian Influenza Conference Philadelphia, PA; McClevey
November 13-16, 2006	Interior Department Electronic Acquisition System (IDEAS) Training Regional Office, Hadley, MA; Boska
March 12-13, 2007	Virginia Managers Meeting Gloucester, VA; Weiler
March 16-23, 2007	Refuge LE Officer Refresher Course NCTC; Williams
June 3-8, 2007	Internet Home Page Development NCTC; Allison
June 4-8, 2007	Boater's Safety Course Annapolis, MD; Williams
June 18-22, 2007	Law Enforcement for Supervisors Course NCTC; Weiler
Aug. 31 – Sep. 3, 2007	Law Enforcement Detail (Labor Day Coverage) Virginia Beach, VA; Williams
September 9-14, 2007	Trail Management Course NCTC; McClevey
September 17-20, 2007	Sign Plan Detail Dover, DE; McClevey

September 26-27, 2007	Chesapeake Strategic Habitat Conservation (SHC) Meeting Annapolis, MD; Weiler
October 14-15, 2007	Chesapeake Bay SHC Pilot Meeting Regional Office, Hadley, MA; Weiler
October 29-31, 2007	IDEAS Training Regional Office, Hadley, MA; Allison
November 4-9, 2007	Joint Project Leaders – Visitor Services Meeting Regional Office, Hadley, MA; Hoskie, McClevey, Weiler
Nov. 29 – Dec. 1, 2007	Law Enforcement Detail (Bear Hunt) Suffolk, VA; Williams
January 21-23, 2008	Street Survival Seminar Atlantic City, NJ; Williams
January 22-25, 2008	Writing Performance Standards Course NCTC; Hoskie, Weiler
February 11-14, 2008	Heavy Equipment Training Warsaw, VA; Weiler, Volunteer Curt Anderson
February 24-29, 2008	Computer Systems Management/ IT Workshop NCTC; Allison
March 25-26, 2008	ECO Team Meeting Gloucester, VA; Weiler
April 11-17, 2008	Joint Law Enforcement Refresher Region 3/Region 5 NCTC; Williams
April 28 – May 9, 2008	Spanish Immersion Course Indianapolis, IN; Williams
June 2-6, 2008	Armor Training at Remington Gun Plant New Hartford, NY; Williams
June 18-22, 2008	Law Enforcement Detail (Operation Grab Crab) Hyannis, MA; Williams
July 6-12, 2008	Field Training Evaluation Program FLETC, Brunswick, GA; Williams

2. Youth Programs

The Youth Conservation Corps, hosted by the Mason Neck State Park, provided enrollees to remove the overlook platform on the Woodmarsh Trail at Raccoon Creek and spread wood chips from the Sycamore Road kiosk to the Raccoon Creek. This area had sustained substantial damage from hurricane Isabel several years ago.

Boy Scouts and Girl Scouts

Scouting involvement at the Mason Neck Refuge has not been fruitful over the past few years. Ranger Marty McClevey interviewed three boy scouts in FY 2008 for potential eagle projects. None of the scouts chose to involve themselves with refuge related projects. McClevey encouraged projects related to connecting children with nature and fire management. One suggested project was to involve scouts in removing dead standing and downed woody material along the length of the Great Marsh Trail enhancing the fire break capability of this urban interface.

In spite of the lack of involvement by scouts, opportunities will continue to be afforded to the scouting community.

3. Other Manpower Programs

The Americorps crews were assigned recovery work in New Orleans and other parts of the south and Midwest. These crews did not perform work on the refuge.

George Mason University student Michael Murray came on duty in early June as an intern. He was supervised by Ranger McClevey to assist with day to day visitor services duties. Mike finished his work in mid September.

To find additional sources of available manpower, Maintenance Mechanic Boska contacted the local county governments inquiring about Community Service Volunteers, e.g. court ordered. Through his efforts the Refuge became included as a location to complete Community Service hours. Community Service Workers, e.g., court ordered, contributed more than 70 hours assisting with maintenance projects. Example projects completed with Community Service Workers are boundary posting and trail maintenance.

4. Volunteer Program

Members of the Northern Virginia Chapter of Ducks Unlimited (DU) maintained 14 wood duck nest boxes on the refuge. The project is an outreach of DU's Green Wings, a program for members under the age of 18. This group erected the boxes in fiscal year 2005 and has continued to maintain the boxes at both Occoquan and Mason Neck.

Ranger Marty McClevey continued to serve as the volunteer coordinator for the Complex. The volunteer newsletter remained the mainstay of informing interested individuals of volunteer opportunities, events and training. The newsletter was posted on the Friends website to reach the membership of that organization. An excel database remains as the means of recording individual volunteer hours.

Volunteers contributed in maintenance, public use and biological programs. In addition, individuals who were working off community service for crimes were also employed to provide

assistance. Steve Boska worked hard to utilize the community service programs of Fairfax and Prince William County.

The volunteer banders who operate the Occoquan banding station staff the MAPS banding sites on the Mason Neck Refuge.

On March 1, volunteers assisted in the annual count of great blue heron nests at the High Point Creek colony site. Over 800 nests were counted in the survey. Other volunteers participated in the Eagle Festival by conducting tours, and setting up for the event.

Otto Swoboda

The greatest shock to the volunteer program came when our longtime volunteer Otto Swoboda became ill and passed away on April 24, 2008. Otto was 81 years old. He accumulated over 6,061 hrs of service from 2003. Otto primarily served as the gate greeter at the Occoquan Bay National Wildlife Refuge but also participated in the Eagle Festival as well as public outreach programs for the Mason Neck Refuge. Otto received the President's Volunteer Service Award, the Secretary of Interior Volunteer Service Award and was the Volunteer of the Year for the Potomac River National Wildlife Refuge Complex for 2004. To date, no other volunteer has accumulated as many hours of service as Otto.



Banding program

Our banding station continues to be the most viable outreach for migratory bird interpretation. This banding program is run exclusively by volunteers. The primary station is located at the Occoquan Bay National Wildlife Refuge in Woodbridge, VA. Fourteen volunteers maintain the banding station under the joint leadership of Bill Teetz and Suzanne Miller. The station is in operation from late March through the end of May. After the station closes, the banders regroup

at the Mason Neck Refuge to operate two MAPS stations to obtain data on breeding birds on the Neck. The banders volunteered their time presenting a banding demonstration at the Mason Neck State Park for the annual Eagle Festival. They greeted 200 visitors and gave 20 specific banding demonstrations. They banded 135 kids with bird buddy wrist bands. Bill Supulski and Dottie Lamolanier created a handout for the station to provide information on the purpose, history and banding facts. They also created interpretive tabletop posters for use at the station and at events. These banders established mist netting sites off Little Marsh Creek and along Sycamore Road, south of the landing point. The information on breeding birds found on the Neck compiled through the MAPS program has been a significant contribution to the comprehensive planning process.

Special Recognition

We want to extend a warm thanks to Dorothy Estep who has volunteered for the Complex since 2005. Dorothy earned the Secretary of Interior Award for cumulative service. Both Dorothy and Otto worked closely staffing the entry booth and assisting at events. Dorothy contributed greatly to the visitor services program. Both she and Otto will be missed.

Paul Dodd continued working in the program assisting maintenance worker Steve Boska at the Mason Neck shop. Paul drove the dump trucks and assisted with electrical and plumbing work.

We want to recognize volunteer Barb Marrow who pushed for a more comprehensive recycling program. Barb moved to have the Friends organization purchase a tire changing machine to remove tires from rims. This machine has enabled the complex to turn in the rims for steel and landfill tires without penalty. She also coordinated the recycling at the ExxonMobil cleanup. This enabled steel and plastics to be sorted and transported to recycling centers.

Joan Patterson coordinated the first annual cleanup of the Featherstone National Wildlife Refuge. Joan obtained assistance through the State's Adopt a Stream initiative and the Prince William County Service Authority. The cleanup took place on refuge and CSX property along an access road off of Marseille Lane. Twenty-two volunteers assisted with the cleanup. The Service Authority graciously arranged for the trash and metal to be picked up and hauled to the landfill.

5. Funding

<u>Fiscal Year</u>	<u>Appropriation</u>	<u>Source</u>
2007	\$ 198,365.00	1261
2007	\$ 78,816.00	1262
2007	\$ 184,722.00	1263
2007	\$ 77,754.00	1264
2007	\$ 2,971.00	Other Appropriated Funds
2008	\$ 289,549.00	1261
2008	\$ 251,384.00	1262
2008	\$ 300,597.00	1263
2008	\$ 81,060.00	1264
2008	\$ 4,140.00	Other Appropriated Funds

Revenue sharing checks were delivered to Fairfax County and Prince William County.

6. Safety

In October 2006, Maintenance Mechanic Boska sustained a bruise over his right eye. As he was chain-sawing a large tree that had fallen a phone cable, the tree snapped, causing the cable to strike him above the right eye. The injury did not cause lost time from work.

During one of the staff meetings conducted in May 2007, the staff viewed the video “Fire Extinguisher Operation”. A short discussion followed.

In September 2007, the Refuge watched a Hearing Conservation video. A group discussion followed.

7. Technical Assistance

Fiscal Year 2007

Administrative Assistant Allison took the “Computer Support for Field Stations” course. After two weeks of training, it was possible for someone at the station to perform minimal IT support through the assistance of FWS IT professionals for the installation and repair of all IT systems.

After a bad storm in FY 2007, we developed equipment networking problems at the Occoquan Bay Contact Station. Internet was down for about 5 months. Repairing the problem involved installing a new router and cables. The issue wasn’t resolved until FY08.

The Complex office router was upgraded to Juniper Router allowing connectivity to the FWS network.

IT professional within the Region visited the Complex and updated all computers and virus protections.

Fiscal Year 2008

Admin Assistant Allison attended the 2008 IT Workshop at NCTC (biennial event) in February. During the workshop Allison was able to attend numerous mini classes to reinforce current IT skills, learn new IT skills, and get a preview of what’s to come.

The Occoquan Bay Contact Station Juniper Router was installed allowing connectivity to the FWS network for our LE Officer and Visitor Services Computers.

An USB Wireless Air card was purchased for the LE laptop computer to allow computer access from the field and to the FBI database.

We experienced continued connectivity issues with the Skycaster satellite at the Mason Neck maintenance shop. The maintenance shop is located in a remote area making internet options limited. It is expected that the issues will be resolved in FY 2009.

Four flat screen monitors were purchased so that all station computers now have greater utility and extra desk space.

8. Other Items

Maintenance Mechanic Boska received the 2007 USFWS Individual Environmental Leadership Award. He promoted and aggressive recycling program and had a solid waste diversion waste of over 50 percent and as high as 63 percent. Through his efforts more 100 gallons of used oil, batteries of all sizes, fluorescent bulbs, IT components, copper, aluminum, paper, plastic, glass, steel, and tires were recycled. He also purchases more than 119 tons of recycled concrete products for road and trail maintenance and 66 gallons of recycled motor oil for use in vehicles and heavy equipment. He also received honorable mention from the 2007 Department of Interior Environmental Achievement Award Selection Panel.

F. HABITAT MANAGEMENT

1. General

Located along the Potomac River and Occoquan Bay, the Refuge consists of 2,277 acres of the over 8,000 acre Mason Neck peninsula and consists of the following habitat types:

<u>Habitat</u>	<u>Acres</u>
Woodland	1,883
Wetland	364
Grassland	15
Brush	10
Administrative areas (i.e. buildings, parking lots)	5

Habitat management has primarily been directed at providing relatively undisturbed habitat for the bald eagles and maintaining and creating habitat for wintering and migrating waterfowl and other resident wildlife populations.

2. Wetlands

The wetlands are split between the broad Great Marsh fronting onto the Potomac in the arch of the boot shaped peninsula and High Point Creek, an impounded drainage system near the toe of the peninsula. The Great Marsh has several meandering creek mouths and is dominated by wild rice, spatterdock, and other open marsh species favored by a constant freshwater tidal exchange. High Point Creek is narrow, protected by forested promontories except at the narrow impounded (large dike) mouth with little exchange of water beyond storm surges and runoff.

High Point Creek was drawn down during late spring as much as it could be drawn down in an effort to provide better foraging opportunities for young eagles and great blue herons.

3. Forests

Upland hardwood forest (1,883 acres) is the predominant vegetative type on the refuge and the peninsula. The dominant deciduous species in the upland forest include: white oak (Quercus alba), chestnut oak (Quercus prinus), red maple (Acer rubrum), American beech (Fagus grandifolia), and yellow poplar (Liriodendron tulipifera). Virginia pine (Pinus virginiana) and loblolly pine (Pinus Taeda) constitute the principle conifer species. Thirty-six species of trees have been recorded on the refuge.



Mason Neck Forest

4. Croplands – Nothing to report

5. Grasslands

Only about 15 acres of grasslands remain on the refuge. During colonial times and up to the early 1900's, numerous acres was used for agriculture (crops and dairy) and logging. Natural succession has converted the grasslands into hardwood forests leaving basically a monotypic habitat of mixed hardwoods with small patches of conifers. Most of the refuge has not been logged in last 40 to 50 years and some areas on refuge have stands of 100+ year old trees.

Grassland management activities are directed at rotational and cyclical mowing of designated fields. One-third (approximately two acres) of the environmental education field is mowed annually as part of a three year rotational strip mowing program designed for educational interpretation and habitat diversity. Maintenance worker Steve Boska mowed the Environmental Education field and the old dairy area at the end of Sycamore Road to maintain these grasslands. Other areas mowed included the weather station field near the maintenance shop and the old home site at the end of Anchorage Road.

6. Other Habitats – Nothing to Report

7. Grazing – Nothing to Report

8. Haying – Nothing to Report

9. Fire Management

In February 2008, along the power line right-of-way, near the “Hunter Check-In” area, heavy winds caused a pine tree to cross a power line. The power line snapped resulting in a fire. At approximately 3:00 p.m., firefighters from Fairfax County arrived. At approximately 3:30 p.m., the crew extinguished the fire. The area involved in the fire was approximately 25' x 133', an area less than 1/10th of an acre.



High Point Power Line Fire



High Point Power Line Fire

10. Pest Control

Ranger Marty McClevey completed pesticide applicator's refresher training in June with intern Mike Murray. Marty surveyed the refuge for specific colonies of mile-a-minute, Japanese stilt grass and Japanese knotweed. A colony of mile-a-minute was found at the heron colony above

the High Point Creek impoundment. The colony encompasses over an acre of understory. Plans will be made in fiscal year 2008 to gain access to this remote site and begin control and eradication. Marty also coordinated the control of invasives at the historic Lexington site on the Mason Neck State Park. He worked with Ranger Marc Ingram to conduct spraying of roundup on stilt grass. Marty coordinated the state park summer crew to spray the site and spray along High Point Trail.

Pesticide Use Report for Lexington Site- July 25 - 26, 2007

Pesticide Trade Name: Razor Pro

EPA Registration Number: 228-366

Application Rate: 2.56 ounces of chemical per 1 gallon of water

Equipment: Solo backpack siphon pump- 3 gallon capacity

On July 25 and 26, 2007 Marc Ingram coordinated the control spraying of Japanese stilt grass (*Microstegium vimineum*) on the Lexington site of Mason Neck State Park in Fairfax County, Virginia. Marty McClevey, Park Ranger for the Potomac River National Wildlife Refuge Complex, a Virginia State certified pesticide applicator (certificate number 101550-G), mixed the formulation and monitored the spray operation.

On Wednesday July 25, spraying began at 1000 hrs and continued until 1530 hrs. Weather: partly cloudy, mid-80's all day, humidity approximately 50 %, winds less than 4 mph, two periods of light rain which did not penetrate the forest canopy to impact the operation. Six individuals operated backpack pump sprayers. Individuals involved in the spraying and mixing of chemical were required to wear long sleeved shirts, nitrile or rubber gloves and safety glasses. Refuge staff wore 16 inch rubber boots.

Application Record – July 25

295 ounces of concentrate

118 gallons of water/mix

Approximately ¼ to ½ ounce of purple dye was added to each tank as a marker.

Approximately 3 acres were sprayed.

On July 26, 2007 the crew returned to the Lexington site to complete the spraying. Marc coordinated the spraying of the horse trail to Gunston Road and to the staging area off Harley Road. Weather: clear, no precipitation, temperature in mid to high 80's, humidity approximately 45% with no wind. Six individuals operated backpack pump sprayers. Spraying began at around 0930 and continued until 1200 hrs.

Application Record – July 26

85 ounces of concentrate

34 gallons of water/mix

Pesticide Use Report for High Point Bike Trail- July 26, 2007

Pesticide Trade Name: Razor Pro

EPA Registration Number 228-366

Application Rate: 2.56 ounces of chemical per 1 gallon of water

Equipment: Solo backpack siphon pump- 3 gallon capacity and 25 gallon capacity poly tank with electric pump.

On July 26, 2007, Ranger Marc Ingram coordinated the control spraying of Japanese stilt grass (*Microstegium vimineum*) along High Point Trail from the State Park Maintenance Shop to the State Park picnic site (approximately 3.5 linear miles). Spraying began at around 1330 hrs and continued until 1625 hrs. Marty McClevey, a State certified applicator mixed the formulation and monitored the spray operation. Backpack sprayers (3 gallon capacity) and a John Deere gator with a 25 gallon tank, were used in this operation. It was not necessary to add dye marker to the tank mixes. Weather: partly cloudy, mid to high 80's, humidity approximately 45% and no wind. Five individuals operated backpacks and two individuals operated the gator with tank. All participants were required to wear long sleeves, gloves and safety glasses.

Application Record – July 26

Backpacks: 45 ounces of concentrate
18 gallons of water/mix

Gator: 128 ounces of concentrate
50 gallons of water/mix

In FY 2008, Marty maintained his pesticide applicators license. He assisted the State park in the second annual treatment of the historic Lexington site and bike trail. Marty worked with intern Mike Murray and law enforcement intern Alex Berberena to open a corridor into the heron colony to enable access by ATV for spray operations. During the heron nest count in March, acres of mile a minute were found. This plant was first observed several years prior but no action was taken to control or contain it. Spraying took place in June and July using Roundup and Rodeo. Between three and five acres of mile a minute were treated. The spray worked to knock out this year's seed crop on 90 % of the plants but more colonies were found later that year in remote portions of the shore. An isolated outbreak was found at the Great Marsh parking lot. It appears that treatment of the several hundred square feet of plants was successful.

11. Water Rights – Nothing to Report

12. Wilderness and Special Areas – Nothing to Report

13. WPA Easement Monitoring – Nothing to Report

G. WILDLIFE

1. Wildlife Diversity

Mason Neck is located just 18 miles south of our Nation's capital and is adjacent to a rapidly growing metropolitan area where habitat is constantly being altered and degraded. The Refuge is located at the end of a boot-shaped peninsula which extends out into the Potomac River and provides a relatively remote area of upland forests and freshwater marshes which are frequented by a diverse group of wildlife species. The monotypic mature upland hardwoods, freshwater marshes, and small grassland areas which comprise the Refuge habitat hosts over 211 species of birds, 31 species of mammals, and 44 species of reptiles and amphibians.

2. Endangered and/or Threatened Species

The primary objective for which the refuge was established was to protect essential nesting, feeding, and roosting habitat for the Bald Eagles (Haliaeetus leucocephalus). There are three primary or historic areas for nesting activity on the refuge: the Great Marsh, the heronry and Potomac River shoreline near High Point, and the middle and upper reaches of High Point Creek. Other significant areas in the vicinity of the refuge are the roost and a nest site on Kanes Creek in the neighboring state park, a nest and roost on the north border of the refuge and Gunston Hall, a nest site between Gunston Manor and Hallowing Point communities, and a nest site on undeveloped land on the north portion of the peninsula.

Historically, the eagles abandoned the nest near the heronry and moved out in along the shore between Anchorage and High Point. Though active for three years, the nest in the heronry seemed in conflict with the herons and the High Point Creek Nest so the move was not surprising. In 2002 the occupied breeding site was abandoned and has not been occupied since.

As in the past, portions of Woodmarsh Trail beyond Eagle Point were closed mid December and reopened in late June early July. The trail has closed every year since 1994, when the nest was discovered.

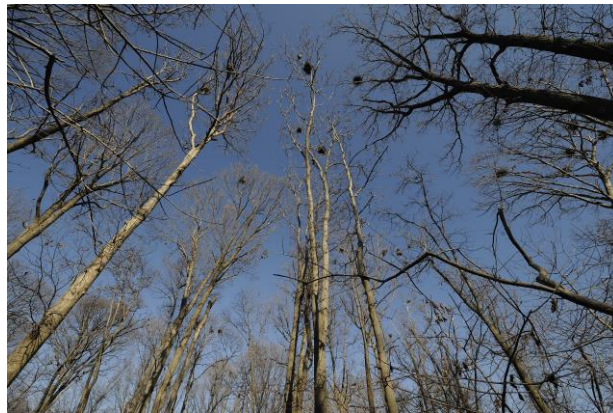
3. Waterfowl

Although Mason Neck is out of the mainstream of the Atlantic Flyway, the refuge, as part of a series of small marshes along the Potomac River, provides migrating and wintering habitat for dabbling and diver ducks. Over 20 waterfowl species have been reported on the refuge. Tundra swans and snow geese, while not numerous, are new additions to the list and have become regular winter visitors in the last six years. Rafts of canvasback, lesser and greater scaup, ruddy ducks, mergansers, and buffleheads are frequently seen offshore.

Ducks Unlimited Northern Virginia Chapter under John Minger continued to maintain wood duck boxes along High Point Creek, the Little Marsh Creek impoundment and the Great Marsh.

4. Marsh and Water Birds

Historically, marsh bird surveys were conducted at Elizabeth Hartwell Mason Neck and Occoquan Bay National Wildlife Refuges in June and July of 1999 using two passive listening intervals (initially a 0-5 minute period and 1-minute final period) and in-between a broadcast response (playback) portion. Only two species of colonial waterbirds (Great Blue Heron and Great Egret) have been identified on the refuge. The population size of the colony in the southwest corner of the refuge has grown from 30 nests in 1979 to over 1,500 in the last few years. During this interval the reproductive potential for the herons in the colony has varied considerable, and maybe related to weather factors prior to fledgling in June (*Waterbirds* 29(3):345-348, 2006).



Little Marsh and Heron Rookery

5. Shorebirds, Gulls, Terns, and Allied Species – Nothing to Report

6. Raptors – Nothing to Report

7. Other Migratory Birds – Nothing to Report

8. Game Mammals

The deer are in relatively good health with multiple sets of twins and few pied bald deer being observed occasionally on the refuge. Information about the whitetail deer hunt is listed in the public use section.

9. Marine Mammals – Nothing to Report

10. Other Resident Wildlife

Wild turkeys have been seen on a more frequent basis near the end of Sycamore Road, the end of Anchorage Road and along High Point road near the head of Little Marsh Road. It appears, based on frequency of sightings that the turkey population may be increasing.

11. Fisheries Resources - Nothing to Report

12. Wildlife Propagation and Stocking - Nothing to Report

13. Surplus Animal Disposal - Nothing to Report

14. Scientific Collections - Nothing to Report

15. Animal Control - Nothing to Report

16. Marking and Banding

The Institute for Bird Populations from Port Reyes Station, California continued operating two Monitoring Avian Productivity and Survivorship (MAPS) stations on Mason Neck, which were started in 1995. The refuge was involved as part of a partnership with nearby Ft. Belvoir letting the refuge piggyback on a military program “Monitoring Avian Productivity and Survivorship (MAPS) Program on Military Installations and other Federal Lands in the Midwest and East: ...”

The refuge's stations are Mason Neck-1 located on Sycamore Road near Old Barn Road and Mason Neck-2 on Little Marsh Road northwest of the High Point eagle nest. Volunteers, trained by IBP, operate the stations and conduct an average of 8 banding sessions between May and August each summer. At the site the birds were captured with mist-nets, identified, sexed, and measured. The 2007 field season resulted in 50 birds being newly banded with 16 recaptured from previous years at Mason Neck-1 site; and 41 birds being newly banded with 8 recaptured from previous years at Mason Neck-2 site during. The 2008 field season resulted in 59 birds being newly banded with 11 recaptured from previous years at Mason Neck-1 site; and 66 birds being newly banded with 12 recaptured from previous years at Mason Neck-2 site during.

17. Disease Prevention and Control

Chronic Wasting Disease was detected in deer herds in several states in the Region in 2005. In 2006, CWD was detected in deer near the West Virginia/Virginia state line. The refuge is in a medium risk area based on distance to known CWD areas and captive cervid herds. A CWD Surveillance and Contingency Plan was developed for the Complex in 2006. Based on the State CWD plan, detection within a 5 mile radius will result in increased surveillance and sampling of the deer herd. Additional cases will result in the designation of a Population Reduction Area and the refuge would work with the State and Counties to implement herd reduction.

The Refuge also completed an Avian Influenza Surveillance and Contingency Plan in response to the threat of H5N1 occurring in the migratory bird population on the east coast. Marty McClevey attended an avian influenza conference at the John Heinz refuge in Philadelphia. Biologist Brenda Phillips went over basic disease concepts and defined pandemic and the evolution of viruses. Attendees discussed the Spanish flu outbreak of 1918, Asian flu of 1957 and the Hong Kong flu of 1968. It was learned that 35,000 people die from the flu each year in US. They stressed the congregating of birds in the arctic as a potential blowup site for the spread of avian flu through wild birds. Domestic poultry operations are a considerable risk for outbreaks. The session went on for two days. McClevey returned and briefed the staff on the current news and means of addressing outbreaks. The region purchased special avian kits with disposable suits, masks and gloves to be used in the event of an avian flu incident.

H. PUBLIC USE

1. General

A highlight for the year was provided by Rob Hartwell, the son of the late Elizabeth Hartwell. The staffs of the refuge and the Mason Neck State Park, volunteers and family members were treated to a boat cruise up the Potomac River from the Belmont marina as far north as Mt. Vernon. The 2.5 hr cruise was relaxing and informative as the staffs could view their management areas from the river.

The new Elizabeth Hartwell Mason Neck National Wildlife Refuge primary entrance sign was installed by the refuge staff on High Point Road.

On March 6, 2007 Marty McClevey was assigned to the annual Eagle Festival planning meetings as the refuge liaison. The Festival, sponsored by the Hartwell Foundation is the largest annual event held on the Neck. Through the meetings, Marty became acquainted with Rob Hartwell, son of the late Liz Hartwell, Theresa Jefferson, the Environmental Education Specialist for the Bureau of Land Management's Meadowood Recreation Area, Anne and Lynwood Gorham,

residents who work closely in the planning and implementation of this event and the staff of Mason Neck State Park. At the initial planning meeting, Marty made the proposal to incorporate the concept of connecting the life and work of Rachel Carson with that of Elizabeth Hartwell. The theme of connecting children with nature was also incorporated into the event planning. He coordinated the event planning for the refuge which included a puppet show on the life of Carson and Hartwell, a bird banding demonstration by refuge banders, special displays on the opportunities for children to connect with nature on the refuge and the van tours of the great blue heron colony.

On April 9, the Elizabeth Hartwell Mason Neck primary entrance sign arrived from the sign fabricator. An unveiling of the sign was incorporated into the formal festival program.



Elizabeth Hartwell Mason Neck Entrance Sign Unveiling

On April 21, 2007, refuge staff and volunteers participated in the Eagle Festival. The weather was outstanding and the public participation was the greatest ever for the event. Traffic counters estimated that 3,700 people attended between 9 AM and 5 PM. The refuge hosted a tent with Friends of the Potomac River Refuges, conducted heron colony tours to the Little Marsh Creek, and presented a special program on Elizabeth Hartwell and Rachel Carson. Over 125 people stopped in at this station. The refuge banders put on a banding demonstration and gave out International Migratory Bird Day posters and bird buddy wrist bands. Manager Greg Weiler served as the master of ceremonies for the program. Deputy Manager Daffny Hoskie provided interpretation of the heron colony; Administrative Support Assistant Stacie Allison staffed the refuge displays and signed up visitors for the van tours. Volunteer Donn Rae Dean drove the van,

Dorothy Estep, Barb Marrow, Joan Patterson, Rene Grebe represented the volunteer and Friends organization activities and Bill Wallen provided expert photographic support.

Mrs. Mary Florence Clark, a former resident of the Sycamore Point area requested permission to visit the old family home-site. Mrs. Clark is in her late 80's and lived at the High Point Farm in the early 1920's. She was born on the farm and lived there for 6 years. Mrs. Clark has valuable information on the farm and work that was done there. At some time in the near future, Ranger McClevey plans to meet with her for the purpose of conducting an oral interview.

In early October of 2007, Manager, Greg Weiler, Deputy Manager, Daffny Hoskie and Park Ranger, Marty McClevey hosted a Comprehensive Conservation Planning (CCP) meeting in which State Park, Virginia Department of Game and Inland Fisheries and Friends of the Potomac River Refuges representatives were invited to provide insight and input into the management, biology and public use alternatives.

The Complex continued to partner with the Mason Neck State Park to share facilities and equipment in the public use realm. Marty McClevey worked with their staff to plan the Eagle Festival, coordinate sign placement, and assist with invasive plant management. On Saturday September 6, 2008, Marty McClevey represented the Complex at the dedication of a monument to the individuals from the region who along with Elizabeth Hartwell were instrumental in the establishment of the refuge. Marty addressed the group of State Park employees and those notable citizens, some of whom traveled from as far away as Arizona to participate in the ceremony. Marty made the following comments:

‘This monument is significant for two reasons. First it stands to honor those of you who worked so hard to secure the nature of the Mason Neck peninsula for future generations and second because it honors all citizens who through activism, advocacy and personal sacrifice have stepped up for the cause of conservation throughout the nation.

As the Visitor Services Specialist, it is my task to ensure that the public has a good understanding of what happened here over time from the Native Americans through today's management strategies.

Interpretation, the means that we use to inform and educate the public, isn't just the relaying of factual information. It is act of connecting people with the resource and moving them to be better stewards. I will tell the story of your work and pray that the youth who visit in school groups, the families who visit for a nature experience and the skilled birders will be inspired by this success story and be moved to carry the torch for the continued work of conservation.

The US Fish and Wildlife Service is proud of the science and hard work that went into the successful recovery of the bald eagle and it is also very aware that this work could not have been accomplished without your dedication.

Proverbs 27:17 says” as Iron sharpens iron, so one man sharpens another”. I pray that we will continue to work together to bring about positive change in the stewardship of our land and that we will always strive to encourage and strengthen each other.”

The monument was placed on a grassed area overlooking Belmont Bay adjacent to the Mason Neck State Park visitor center.

Thomas Jefferson High School continued to bring students out to the refuge to conduct salamander and habitat studies. The AmeriCorps National program assisted with a variety of projects at the State Park and on the refuge. Deer hunts were conducted in partnership with Fairfax County and the State Park. New partnerships in trail management were fostered with the Bureau of Land Management through the inspiring work of BLM Outdoor Recreation Planner Jeff McCusker. Refuge Officer Gareth Williams promoted community relations through his outreach work with the residents of Hallowing Point. Officer Williams made huge gains in public relations by attending home owners meetings, visiting residents and attending public programs.

Visitation Statistics:

Joseph V. Gartlan Jr. Great Marsh Trail total visits for year= 6,901

Woodmarsh Trail total visits for year =8,488

High Point Multi-use Trail Total Visits for year=3,783

Total Visitors= 19,172

Regional Sign and Trail Guidance

In September of 2007, John Sauer and Kathy Zeamer requested the assistance of Ranger McClevey in filling in the gaps related to trail guidance in Region 5. Marty attended the Trails Management, Plans, Projects, People course at NCTC from September 10-14, 2007. He also participated in several joint trail construction projects through the Bureau of Land Management's Meadowood Recreation Site. He obtained specialized training in the use of the Ditch-Witch grader/compactor. Marty worked closely with Meadowood's Ranger Jeff McCusker on these projects and in assessing future trails projects on the refuge. In November, Marty participated in the Visitor Services conference at the regional Headquarters in Hadley, Massachusetts and gave a presentation on trails management to the visitor services professionals in attendance. Over the course of 2008, he received a handful of requests for assistance from refuges.

Marty was also invited to participate in a sign review for the Bombay Hook National Wildlife Refuge in Delaware on September 17, 18 and 19, 2007. Through his participation in this review, Marty was asked to work with Julie Study and other visitor services professionals in the region to create new sign guidance for Region 5 refuges. He worked closely with Julie on this task and spent a day at Harrison Lake Fish Hatchery to review the draft for final submission to the regional office.

Marty continued this work on the Complex's refuges by starting the ground work for sign inventories. He ordered the replacement primary entrance sign for Mason Neck, reflecting the new name for the Elizabeth Hartwell Mason Neck refuge. He also ordered a new standardized secondary entrance sign for the Woodmarsh Trail. Additional sign requests were submitted and approved for the refuge maintenance shop, the Occoquan Bay Wildlife Drive and visitor parking lot. One obstacle imposed in this fiscal year was the loss of the Service Sign Shop in Wisconsin. A frantic search for new vendors was a priority for the sign review committee. Several vendors were approved including the UNICOR sign shops in the east and west. Marty ordered the new signs through UNICOR and found the service, quality and turn around time to be impressive.

Eagle Festival

The refuge participated in the annual eagle festival sponsored by the Hartwell Foundation. The refuge played a key role in the planning and facilitation of this April 19th event. Over 1000

people attended the event with over 90 visitors participating in the heron colony van tours. Refuge event tents were utilized and shared to provide cover for invited organizations and agencies. .

Data Collection

Ranger McClevey installed a new data collector on the Great Marsh trail to replace a more outdated version of the same unit. The new unit, the Diamond Traffic TTC-4420 has a lower battery consumption operating up to a year on a set of batteries. Three data collections points are utilized at Mason Neck. One point is located on the Great Marsh Trail about 100 yards from the main parking lot. The second is located on the Woodmarsh trail just over 100 feet down the trail from the parking lot. The third is located on the High Point Bike Trail on a footbridge north of Sycamore Road. These units have enhanced our efforts to accurately determine trail use and annual visitation. Malfunctions were further reduced by the replacement of the current convex bike reflectors with flat surface mirrored reflectors. The flat reflectors significantly increased the return strength of the signal.

No volunteers were available to continue visitor use data collection at any of our sites during the fiscal year.

2. Outdoor Classrooms-Student

Thomas Jefferson High School

In FY 2007, Daffny Hoskie continued to facilitate research projects with students from Thomas Jefferson High School. Seventy students carried out several projects involving the monitoring of salamanders at vernal pools along High Point, Anchorage, Sycamore Point and Little Marsh Creek Roads.



TJ High School Students working at Vernal Pool

Thomas Jefferson High School continued bringing students out to Mason Neck in 2008 to conduct deer pellet counts and to monitor salamander activity at several vernal pools. Deputy Manager Daffny Hoskie worked closely with the school in coordinating and facilitating these visits.

Virginia Tech

Statistics have shown a decrease in the number of students seeking degrees in agriculture and forestry. Due to this trend, Virginia Polytechnic Institute and State University obtained a Preserve America Grant through the congressionally chartered Fish and Wildlife Foundation. This specific grant request known as Outdoor Laboratories for Student Scientists would be coordinated by Forestry professors at Virginia Tech and facilitated by the Fish and Wildlife Service. The purpose of the program is to provide High School students with a viable field experience in the realm of forest management to encourage career choices in agriculture and forestry.

High School Students from two classes at Freedom High School in Woodbridge, Virginia have been selected to participate. Dr. Nicholas Furrman along with Professor John Peterson, John Seiler and Carolyn Copenheaver will serve as the core team to implement the program. Marty McClevey will serve as the liaison for the Complex and Dr. LouEllen Brademan from Freedom High School will serve as liaison for the school.

The following is a quote from the project summary:

“...create a collaborative relationship between high school ‘student scientists/historians,’ their teachers, and researchers from Virginia Tech in the collection, interpretation, and sharing of land-use and cultural history data at the Mason Neck National Wildlife Refuge. Working with natural resource scientists and anthropologists, students will collect data on soils...tree rings...and vegetative species composition...and enter this information on line, creating a digital historical database”.

The team met in August of 2008 to tour the Mason Neck Refuge to select sites appropriate for the students to collect soil and vegetation data. A meeting will take place in December of 2008 with a pilot program taking place tentatively in the spring of 2009.

3. Outdoor Classrooms-Teachers – Nothing to Report

4. Interpretive Foot Trails

Visitation to the refuge continued to be monitored through the use of trail counters on the Woodmarsh and Great Marsh Trails. A new Diamond Traffic 4420 unit/counter was installed along the new High Point Bike trail to determine the number of individuals who walk and bike through the refuge to access the State Park

Marty McClevey attended the Trail maintenance and construction course at the National Conservation Training Center. He worked closely with Rangers on the peninsula to coordinate training and construction projects. Marty mapped out work sites and potential rerouting along the Woodmarsh Trail. He attended trail maintenance and construction training at the Meadowood Recreation Area where he learned to use a variety of mechanized equipment for hauling material, cutting and benching trail corridors. He and volunteer Barb Marrow participated in a training and work day with the BLM at the Douglas Point property in Calvert Maryland.

Ranger McClevey spent a great deal of time assessing the Woodmarsh trail to evaluate the potential for major rerouting to alleviate poor drainage, restore a proper tread and create a corridor that is more scenic and user friendly. Much of this work was incorporated into the CCP. Measurements of boardwalks along the trails and distances to specific trail work areas were

compiled. Regional Engineer Richard Ye walked the trail with McClevey to determine options for the renovation or reconstruction of all boardwalks along the trail. Manger Weiler and McClevey utilized the DOT Fed Highways report to obtain useable statistics and data for future work including the proposed construction of an observation platform at Eagle Point. McClevey worked with Fairfax archaeologist Mike Johnson to discuss the historical significance of sites along the trail and specifically at Eagle Point. McClevey had recovered a variety of quartz projectiles points from the trail corridor near Eagle Point and incorporated the points into the museum property for the refuge. Ranger McClevey was concerned that continued use of access points to the Great Marsh near Eagle Point were detrimentally impacting the cultural resources of the site.

Johnson indicated that he believed that sites along the Great Marsh were some of the most historically significant in Fairfax. This is due to the once thriving Native American culture and the interaction of the tribes of the Neck with Captain John Smith as noted in diaries and reports from the 1600's. Johnson believes that most sites on the refuge are still intact and some may even exist without having been disturbed by man other than logging. Johnson and McClevey worked out a plan to conduct test pit sampling at locations near Eagle point to enable the construction of a 16x20 foot covered platform with accessible ramp. Johnson was very impressed with the potential historical significance of the site.

Construction of a platform at Eagle Point would provide trail users with a viable destination which would afford better viewing of the marsh. Directing visitors to the platform would alleviate unauthorized travel off of the trails and therefore protect the integrity of the cultural sites.

Refuge Law Enforcement Office Gareth Williams began enforcement of trespass into the closed portions of Sycamore Point Road. The State Park installed a sign at the High Point Bike Trail crossing on Sycamore to inform visitors that they are not permitted to walk the road eastward to access the Woodmarsh Trail and that they are entering onto the National Wildlife Refuge.

A fallen tree damaged 10 feet of a boardwalk located on Woodmarsh Trail. Maintenance Mechanic Boska and Volunteer Paul Dodd repaired the damaged portion of the boardwalk. In May, heavy winds during a thunderstorm, uprooted two trees on the Great Marsh and damaged a 10 foot portion of the paved Trail.



Damage to Great Marsh Trail

In July 2007, a Virginia State Youth Conservation Corp completed work at the Refuge. Under the direction of Maintenance Mechanic Boska, the 14 person team worked along with STEP employee Michael Murphy and volunteer Paul Dodd. Together the team completed extensive upkeep to Woodmarsh trail. The projects included lining a large portion of the trail; laying wood chips along Fern Pass; installing information signs along the trail; removing the old and deteriorated overlook at Raccoon Creek; and repairing 48 feet of split rail fence along the trail. Maintenance Mechanic Boska attended the YCC graduation and presented each member with a Refuge Certificate of Appreciation.



Virginia State Youth Conservation Corp Team

In May 2008, an Americorp Team completed maintenance on Woodmarsh Trail. The team along with Refuge Staff and a Refuge volunteer spread over 100 tons of recycled concrete, constructed turnpikes, and improved drainage.



Americorp Team Eagle 3 with Refuge Staff



Geotextile fabric underlying Recycled Concrete



New Base for Woodmarsh Trail

In August 2008, the Americorp Team, Badger 2, a group of 9, assisted the Refuge Staff and Refuge volunteers with a number of projects at Mason Neck NWR. The group continued with trail repairs along the 3 ½ mile Woodmarsh Trail, spreading more than 18 tons of recycled concrete. The group completed maintenance on the kiosk located at the Woodmarsh Trail Parking Lot, completed repairs to the Woodmarsh Trail Parking Lot, and limbed shrubs and trees along the trail.



AmeriCorp Team Badger 2, Refuge Staff, and Volunteer



AmeriCorp Team Badger 2 on Woodmarsh Trail

5. Interpretive Tour Routes

Marty McClevey worked with Mason Neck State Park Ranger to discuss possible interpretive waysides and displays along the length of the High Point Bike Trail. The draft Comprehensive Conservation Plan details future proposals to create new interpretive routes for bikes and foot traffic.

6. Interpretive Exhibits and Demonstrations

Patricia Wood worked with Marty McClevey in presenting a puppet show for kids at the Eagle Festival on April 21. The featured a yellow warbler. The migratory bird activities were very well attended. The refuge also hosted van tours to the Little Marsh Creek great blue heron colony. This is always a popular tour.

As part of the Comprehensive planning process, a careful look was taken at the on site interpretive exhibits and waysides. The Great Marsh panels are relatively new. One of the panel cases was found to have been damaged by vandals. The replacement Plexiglas was obtained but the repair work has not been completed. The Woodmarsh panels are in good shape. It was proposed that a new kiosk be installed at the head of the Woodmarsh trail with a new set of panels. Maintenance Worker Steve Boska converted one of the empty panel spaces into a bulletin board. The kiosk on Sycamore Road continues to deteriorate and future planning will also look at moving or reconfiguring the structure and panels.

Marty McClevey found that the Wilderness Graphics angled aluminum wayside at the trail head was filling with water causing discoloration and possible damage to the fiberglass embedment panel itself. The brochure box at the trail head was replaced with a larger multi-compartment redwood box. After continually finding the brochures wet and moldy, Ranger McClevey contacted Wilderness Graphics to request advice on why a closed box continues to draw in rain. Larger replacement lids were sent out and installed on the boxes. This seems to have remedied the situation.

Ranger McClevey discussed the possibility of installing waysides on the High Point bike Trail. The State Park is interested in working on this but no designing or planning has been completed.

7. Other Interpretive Programs

Marty provided interpretive displays at each of the Comprehensive Conservation Planning meetings. On May 23, 2007, Marty facilitated a tour of the Occoquan Bay and Mason Neck Refuges for the Human Resources office of the Fish and Wildlife Service. Approximately 40 individuals participated in the tour.

In FY 2008, Marty McClevey coordinated the refuge's activities at the annual Eagle Festival at Mason Neck State Park. The refuge utilized a 10x20 tent to display interpretive information and to provide the Friends Organization with space. He pared down the typical displays to provide information on Elizabeth Hartwell, the complex and how we connect children with nature. This area was staffed primarily by members of the Friends Org. Over 1000 people attended this annual event.

McClevey worked with volunteer Patricia Wood to conduct van trips to the High Point Creek impoundment from which visitors could view the Great Blue Heron colony nest sites. This has always been a popular tour and 8 tours of were run on the day of the festival with almost 100 participants.

Refuge volunteers run the banding program at the Occoquan Refuge banding station and the MAPS station. The banders gave 40 presentations to over 200 children. A "wing span" banner enabled the kids to select a bird, compare their wingspan and then get measured by the banders and banded with a bird buddy wrist band. International Migratory bird day posters were handed

out to the public. Ranger McClevey also conducted a tour of the Great Marsh Trail for a Scout troop from Woodbridge. This is the second year he has provided this tour

8. Hunting

In FY 2007, the Complex continued to utilize lottery hunts to manage the white-tailed deer population on the Refuge and State Park. Hunter Orientation sessions took place on the evening of Friday, October 20 and the morning of Saturday October 21 at the Woodbridge Campus of the Northern Virginia Community College. This facility, rented by the Complex for this function, has convenient parking and access to the interstate and can comfortably accommodate a large number of hunters in each session. Two hundred and nineteen hunters attended the sessions. Volunteers Patricia Wood, Steph Leon and Chris Leon assisted at the orientation sessions. Members of the Mason Neck State Park Staff participated in segments of the orientations. Deputy Manager Daffny Hoskie coordinated the sessions and created the PowerPoint presentations. Administrative Assistant Stacie Allison and Maintenance Worker Steve Boska also provided critical support to the sessions by coordinating the sales of the hunt permits.

On November 5 the refuge and State Park facilitated scouting on the Mason Neck State Park and the National Wildlife Refuge. Ranger Marty McClevey monitored the scouting activities which took place between 8AM and 5 PM. McClevey was pleased by the fact that many hunters brought their spouses, children and parents to the scouting day. The scouting took place on a Saturday which coincided with the opening of black-powder hunting. It was realized by the lower turnout for scouting that many hunters gave up the opportunity to scout for the opportunity to take in a day of hunting. The refuge staff agreed that future scouting would take place on a Sunday to avoid hunt conflicts. Fifty-seven hunters participated in the scouting along with about 20 additional family members joining them for the day.

The annual Mason Neck Management hunt took place over the course of two days in November and a third day in December. Over two hundred hunters participated in the three days of hunting. The Complex continues to see a decline in the number of applicants for the hunts. This is representative of a State wide trend.

In FY 2008, managed white-tailed deer hunts were facilitated on November 27 and 28 and December 7, 2007. Orientation sessions were held on Friday October 19 and 20 at the Woodbridge campus of the Northern Virginia Community College. All hunters who participated in the hunt were required to complete one of the sessions session prior to purchasing a hunt permit. On November 3, we facilitated a hunt scouting day at the Mason Neck Refuge and Mason Neck State Park to enable the selected hunters to walk over the hunt area to scout for deer sign. Fifty-nine hunters, some with families and friends, participated in the scouting opportunity. The number of hunters participating was down from previous years because the scouting took place on a Saturday which was the opening day of black powder gun hunting instead of a traditional Sunday scout day. Plans for next year are to return the scout day to Sundays.

Scouting: 59 hunters

November 27: 134 hunter

November 28: 82 hunters

December 7: 92 hunters

9. Fishing – Nothing to Report

10. Trapping – Nothing to Report

11. Wildlife Observation

In FY 2007, during the annual Eagle Festival, the refuge hosted van tours to the Little Marsh Creek heron colony. This portion of the refuge is closed to the public. Thirty people took advantage of this opportunity to view the colony.

Ranger McClevey began surveying the Woodmarsh Trail corridor for rerouting options to improve wildlife viewing opportunities. The refuge staff discussed plans to build a viewing platform at Eagle Point to improve wildlife viewing of the Great Marsh and to correct and eliminate impacts to sensitive cultural sites at that location. Opportunities to improve and expand wildlife observation at Mason Neck were discussed intensively through the Comprehensive Conservation Plan process.

In FY 2008, Permits were issued to the Northern Virginia Bird Club and Northern Virginia Audubon Society to conduct Christmas bird counts at Mason Neck and Occoquan and to conduct a spring migration count and a waterfowl count. Both organizations conducted monthly bird walks at the Occoquan Refuge.

12. Other Wildlife Dependent Recreation

The Audubon Society of Northern Virginia conducted a Christmas Bird Count on the Mason Neck Refuge. This is an annual permitted event for the refuge.

13. Camping – Nothing to Report

14. Picnicking – Nothing to Report

15. Off-Road Vehicling – Nothing to Report

16. Other Non-Wildlife Oriented Recreation

As in previous years Gary Knippling, a local running enthusiast and resident was permitted to use a portion of the Woodmarsh Trail for a leg of the Eagle Run, a 10K foot race. The race is a fund raiser and generally has no more than 25 participants. The race has been allowed to take place on the refuge trail because of it being an annual event and a tradition on the peninsula.

17. Law Enforcement

In late FY 2006 and to begin FY 2007, the Potomac River NWR Complex saw the arrival of its first full time officer to the station. The task of getting the law enforcement program up and running at the Complex was made easier with the assistance of the local zone officer and soon, radio communications, court procedures, equipment, a fully-operational vehicle and relations with state and local police began to fall into place.

Without consistent, full time, law enforcement presence at the Potomac River NWR Complex prior to FY 2007, the public had no recourse brought upon them for breaking the law on the refuges. FY 2007 brought with it a wide range of violations at Mason Neck and the refuges.

Common violations at the refuge included the following: numerous cases of trespassing, both off trail and along the refuge shorelines during the summer months, as river goers could not resist temptation to come ashore by foot, boat and personal watercraft, such as Sea Doo's and jet-skis. Dogs on the refuge often came with the boaters and reports of lost dogs chasing animals in the refuge began coming in. A few problems arose with ATVs trespassing in the refuge, contributing to trail and general ecosystem damage.

Illegal take of both plants and animals can be an ongoing concern on many refuges across the country, and Mason Neck is no exception. In April of 2007, problems with illegal take began to occur on the refuge, including that of Morel mushrooms, when refuge law enforcement caught two women trespassing in a closed area having collected over 110 Morels.



113 Illegal Collected Morel Mushrooms at Mason Neck.

Early on, problems were common with mid-afternoon rendezvous' in the Woodmarsh Trail parking lot, as it offered a secluded spot off of the busier, main portion of Gunston Rd. Multiple incidents involving sex offenses were encountered. Alcohol was also present in vehicles entering the refuge, evidenced by the reports from maintenance when they emptied the refuge garbage cans.

As the weather begins to warm in the spring, so does the need for enforcement. In April of 2007, a stolen '07 Ford Mustang GT, reported out of Washington D.C., was abandoned in the Woodmarsh Trail parking lot and then torched. The incident occurred sometime between

midnight and 0600 hours. The car fire scorched the branches and leaves and trees approximately 15-20' high and it was extremely fortunate that the rain the refuge received over the previous few days did not allow the car fire to reach very far into the woods. Refuge law enforcement turned the case over to the Fairfax County PD, who has an entire vehicle theft investigation division.



Stolen Mustang torched in Woodmarsh Lot

Not all incidents happen during daylight hours, as many incidents occur after dark. Refuge law enforcement has responded to numerous calls from concerned neighbors of the refuge for shots fired after dark. Certainly, poaching efforts are known to occur on nearly all properties on the Mason Neck peninsula including federal, state and local. Another example of night activity at Mason Neck NWR, occurred during a traffic stop one summer night on a vehicle carrying four individuals who were trespassing on the refuge. Public entry of the refuge is strictly prohibited after dark. During the stop, refuge law enforcement discovered that one of the passengers had an active warrant with Fairfax County PD for armed robbery with a handgun. Refuge law enforcement assisted the county with the warrant and took the suspect into custody.

Another common problem on refuges is dumping. Dumping can include trash, household items, yard debris or just about anything. Mason Neck has not had too many problems with this, however, it does happen.



Trash dumped in Great Marsh Trail Lot

Due to the nature of working in a highly urbanized area of northern Virginia, refuge law enforcement regularly finds itself assisting local police agencies with traffic accidents. During January of 2007, refuge law enforcement had left the refuge and encountered a vehicle at the intersection of Gunston Rd. and Route 1, which had a small fire coming from the gas cap of the car. Refuge law enforcement quickly notified Fairfax County PD and the fire department, confirmed no one was trapped in the vehicle and sealed off the area as the fire quickly engulfed the vehicle and became extremely hot and dangerous. Refuge law enforcement assisted the county by directing traffic and keeping onlookers away from the scene until the fire was out.

A more common aspect of refuge law enforcement occurs during the refuge controlled whitetail deer hunts. Hunters, although required to attend hunter orientation each year when selected, continue to violate refuge hunting regulations such as, hunting within 100 yards of the road and carrying a loaded firearm on a road. Regulations are assessed and updated each year as part of the hunt program.

FY 2008 was noticeably different than FY 2007 as far as enforcement issues were concerned on the refuge. Numerous cases were made during 2007 that refuge law enforcement believes helped to lessen some of the ongoing issues at the refuge. Word was spreading in the local community that there was now a consistent law enforcement presence at Mason Neck.

Many of the minor issues continued throughout the year, including many cases of dogs off leash along the trails and continued trespass along the refuge's sensitive shoreline during the warmer months. Enforcement was needed almost daily along the shore. Activities of some the intoxicated boaters coming ashore included running their dogs, drinking in public and construction of a make-shift fort for a fire. Fires are also prohibited on the refuge.



Illegally constructed fire hut at MN

The numbers of incidents involving sexual activities lessened in FY 2008, however, they still occurred. Violation notices were issued for indecency and disorderly conduct for sexual ‘misconduct’ in trail head parking lots.

Shoreline trespassing concerns were addressed by refuge law enforcement as they, along with the help of a SCEP LE intern, re-posted Mason Neck’s entire shoreline boundary during a very hot August. The shoreline had not been posted in approximately 18 years and numerous signs had been wiped out by powerful storms and ice damage.



Refuge LE posting the MN shoreline

The refuge’s 2008 hunting season saw the addition of some new refuge hunting regulations, including an antler restriction on male whitetail deer in an effort to achieve refuge herd

management goals. This created problems. Refuge law enforcement seized eight illegally killed deer that did not fall within the new guidelines. This is even after hunters were briefed at length during the refuge's mandatory, annual hunt orientation. The hunters were fined and the meat was donated to Virginia's Hunters for the Hungry Program that was coordinated by refuge law enforcement.



Illegal bucks killed during 2008 hunt

Poaching issues continue to be a concern at numerous places on Mason Neck, both at the refuge and other state owned properties. Shots fired after dark along Gunston Rd. were heard and reported although no one was caught. Here, refuge law enforcement examines a fresh carcass that was found by one of the first day hunters, that was believed to have been shot illegally along Gunston Rd. at night and then died in the refuge.



LE investigates potentially poached deer

18. Cooperating Associations – Nothing to Report

I. EQUIPMENT AND FACILITIES

1. New Construction – Nothing to Report

2. Rehabilitation – Nothing to Report

3. Major Maintenance

In February 2007 the fuel shut off solenoid to the Ford 900 Dump truck failed. A commercial truck repair made a service call to the maintenance shop. The road service mechanic instructed Maintenance Mechanic Boska about completing the repairs. Maintenance mechanic Boska completed the repairs.

Also in February 2007, the Kubota 7100 required new brakes and hydraulic control valves. Repairs were completed off-site.

In July 2007, the motor to the jon boat required repairs. The jet pump assembly was removed and the impeller, intake bracket studs, liner, and the shaft sleeve. The jet motor also needed to tune-up. In another major project, contractors replaced the shingles of the maintenance shop, pole shed, and utility shed, and installed new gutters and leaf guards in each of these buildings as well as the ‘Kelly’ building.



Volunteer Stef Leon paints the new fascia of the roofing project.

July 2007 was the focal point for other major maintenance repairs. The fuel dispensing pump of the gasoline vaulted tank required replacement. Volunteer Paul Dodd completed the repairs.



Volunteer Paul Dodd takes a break during the repair of the gasoline dispensing unit.

Repairs and break downs continued throughout the month of July 2007. The clutch and slave cylinder on the Dodge 3500 Ram utility truck needed repairs.

The summer months of 2007 were an ideal time to complete necessary roads repairs. Maintenance Mechanic Boska and volunteers completed a drainage ditch on Anchorage Road and replaced culverts along High Point Road.



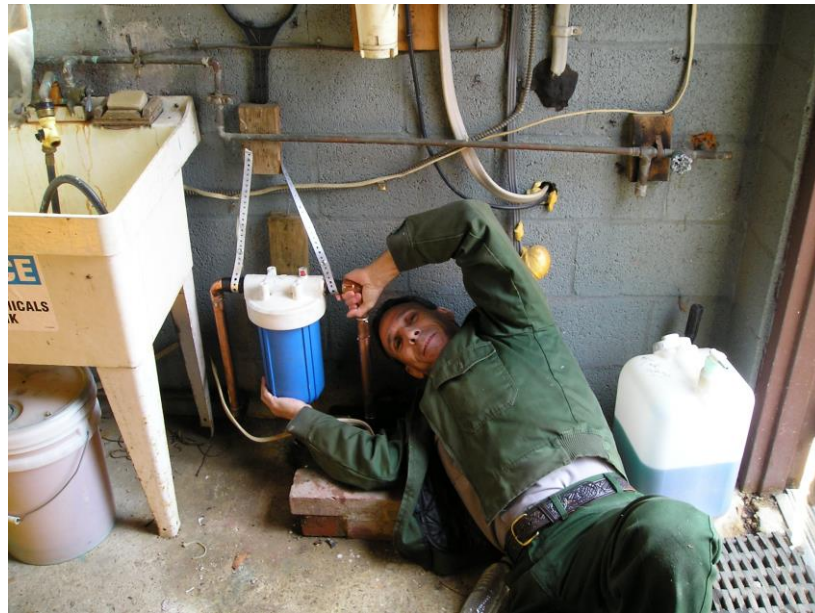
Who Say's Work Can't Be Fun



Maintenance Mechanic Boska Prepares Site for the Replacement Culvert

In January 2008 the Ford 2004 Sportrac's 4 wheel drive was inoperable. Repairs included replacing the transfer case shift fork, tire rotation, and tire balancing.

In February 2008, Volunteer Paul Dodd installed an in-line water filter in the maintenance shop. This filter will prevent sand particles from clogging water fixtures.



Volunteer Paul Dodd works on the project

The maintenance shop and maintenance compound benefited from a number of improvement projects. Contractors installed energy efficient windows and a storm door on the maintenance shop. Exterior electrical outlets were installed in the heavy equipment parking area within the maintenance compound.

4. Equipment Utilization and Replacement

In June 2008, the Refuge purchased and received a Cyclone Rake, power vacuum, for the removal of leaves and debris from the maintenance area, parking lots, and other areas at Mason Neck NWR and Occoquan Bay NWR.



STEP Employee Mike Murphy uses the Cyclone Power Rake

The refuge received two new equipment trailers to transport heavy equipment. Because limited access to the maintenance shop, the trailers were delivered “piggy-back” to Occoquan Bay NWR, where refuge personnel off-loaded the trailers and later moved the trailers to Mason Neck



Maintenance Mechanic Boska off-loading the trailer

In August 2008, the Refuge received an all aluminum storage shed. The maintenance staff will use the 10 x 12 foot shed for additional storage space, thereby creating more space in the maintenance shop.



Storage Shed Being Off-loaded at Delivery

5. Communications Systems – Nothing to Report

6. Computer Systems – See: E. Administration - 7. Technical Assistance

7. Energy Conservation

In May 2007, Maintenance Mechanic Boska installed solar powered battery charging systems on the loader, dozer, and wood chipper. Besides charging the battery, the two watt unit also prevents the build-up of lead-sulfate deposits on the battery plates.

Throughout FY 2007, an aggressive recycling and solid waste disposal program continued. The Refuge recycled approximately 52 percent, or 4360 pounds of solid waste. Recycled items included metal, batteries, paper, plastics, tires, and techno-trash.

In April 2008, the Refuge purchased a tire changer. Maintenance staff will use the manual tire changer as a means to salvage scrap metal tire rims on used tires washed up along the shoreline or tire and rims discarded on the any of the three refuges within the Complex.



TSI Tire Changer

The Refuge purchased eight recycling stations for use within the Refuge. Refuge Staff placed the recycling stations at parking lots, near buildings, and along trail routes.



Recycling Station at the Woodmarsh Trail Parking Lot

Throughout the year, an aggressive recycling and solid waste disposal program continued. The Refuge recycled approximately 72 percent, or 5074 pounds of solid waste. Recycled items included metal, batteries, paper, plastics, tires, and techno-trash. More than 135 gallons of used oil was also recycled.

8. Other

On April 15, 16 and 17, 2007, a major nor'easter storm moved through the area. NOAA recovered peak winds of 51 M.P.H. occurred in the area. Heavy winds and heavy rains downed many trees. The maintenance shop was without power for three days. The main cause for this power failure is shown below.



Trees down near Maintenance Shop

In March 2008, two major storms passed through the area. Winds blew down many trees within the Refuge and along roads. Many hours were spent cleaning up after the storms.



Refuge Manager Greg Weiler removes storm debris with the Deere LBT 100



Park Ranger Marty McClevey removes more debris from the storms

In July 2008, USFWS Headquarters asked Maintenance Mechanic Boska to travel to NCTC and give USFWS regional office personnel, SAMMS coordinators, facility maintenance coordinators, and asset management coordinators an overview of how he used the SAMMS Preventive Maintenance (PM) module, how he set up the PM's and how long he took to do so, what the pros/cons of using them are, what kinds of maintenance activities he used PM's for, whether the PM's helped with determining O&M costs for assets, and whether the use of PM's helps reduce deferred maintenance

In September 2008, Tropical Storm Hanna dumped more than 7 inches of rain in some areas. While damage to Refuge assets was minimal, minor washouts occurred on Little Marsh and Sycamore Roads.



Little Marsh Road



Sycamore Road

J. OTHER ITEMS

1. Cooperative Programs – Nothing to Report
2. Other Economic Uses – Nothing to Report

3. Items of Interest

The Potomac River NWR Complex received Honorable Mention in the Department of Interior 2007 Environmental Achievements Awards for recycling and waste and pollution prevention.

4. Credits – Nothing to Report

K. FEEDBACK – Nothing to Report

OCOQUAN BAY NATIONAL WILDLIFE REFUGE

Woodbridge, Virginia

INTRODUCTION

Located about 20 miles south of Washington, D.C., Occoquan Bay National Wildlife Refuge is a 644 acre parcel on a peninsula bordered by the sandy river shoreline of Belmont Bay, Occoquan Bay and the tidal flats of Marumsco Creek. It lies approximately 4 miles east of the fall line separating the Coastal Plain from the Piedmont Uplands Province, resulting in alluvial terrace deposits underlain by sand, silt, clay, and gravel in a massive eastward-thickening wedge of sediments. "Occoquan" is derived from a Dogue Indian word meaning "at the end of the water". Adjacent to the confluence of the Occoquan and Potomac Rivers, tributaries to the Chesapeake Bay, the location made this area a stopover site for migrant birds as well as a natural site for Native American and colonial settlement.

Occoquan Bay NWR is made up of two parcels formerly known as the Woodbridge Research Facility and the Marumsco National Wildlife Refuge. The research facility, which served as an Army communications in the 1950's and 1960's and a top secret research center in the 1970's and 1980's, closed its operations in September of 1994 under the Base Realignment and Closure Act (BRAC). Local citizen initiatives and political support led to the signing of legislation by President Clinton in September 1994, authorizing transfer of the entire facility to the U.S. Fish and Wildlife Service. The site was formally transferred in June, 1998. Marumsco NWR had been established in 1973 when the Army exceded the creek p0ortion of the property. Recombining the two parcels with the new name Occoquan Bay gave the site more community recognition and management capability.

As a classified Army site, the Woodbridge Research Facility was closed to the public. Mowed and cleared for electronics testing, the site contains a diversity of grassland and wetland plant species unusual in the heavily developed Potomac region. Its diverse habitats support a correspondingly high number of wildlife species, particularly migrant land and waterbirds and grassland nesting species. Wetland habitats cover about 50 percent of the sire, and include wet meadows, bottomland hardwoods, open freshwater marsh, and tidally influenced marshes and streams. About 20 percent of the unit is upland meadows, with the remaining vegetated areas consisting of shrub and mature or second growth forest. The refuge is managed to provide early successional habitats and appropriate wildlife dependent recreational opportunities, to educate visitors on the results and benefits of habitat management for wildlife, and for the enjoyment and benefit of people.

The Refuge is located in Prince William County, one of the fastest growing counties in the Commonwealth of Virginia, with more than 241,000 residents. The county consists of 222,305 acres of land and 51,200 acres of water. It is comprised of single family and multi-family residential homes, agriculture, parks and open space, and government, commercial, and industrial facilities. Employment is high, predominately in government and government-associated services or activities.

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A. HIGHLIGHTS



September Sunrise at Occoquan Bay NWR

B. CLIMATIC CONDITIONS

See Elizabeth Hartwell Mason Neck NWR.

C. LAND ACQUISITION

1. Fee Title – Nothing to Report
2. Easements – Nothing to Report
3. Other – Nothing to Report

D. PLANNING

1. Master Plan – Nothing to Report
2. Management Plan – Nothing to Report
3. Public Participation – Nothing to Report
4. Compliance with Environmental Mandates – Nothing to Report

5. Research and Investigations – Nothing to Report

6. Other - Nothing to Report

E. ADMINISTRATION

1. Personnel

See Elizabeth Hartwell Mason Neck NWR – Staff shared as part of Potomac River NWR Complex.

2. Youth Programs

In FY 2007, the Complex continued its involvement with Boy Scouts of America and Girl Scouts of the USA. A handful of inquiries were made by Boy Scouts seeking to complete Eagle Projects at the Refuge. One scout met with the staff to discuss how they might obtain a meaningful experience within the Complex. There continues to be less interest by scouts in completing projects at all of the refuges of the Complex.

We continued to maintain a relationship with the Girl Scout Council of the Nation's Capital. The Council has been a viable partner with this refuge since 1999. Marty McClevey, Park Ranger and Volunteer Coordinator for the Complex encouraged the participation of local Girl Scouts in refuge projects and annual events. Marty coordinated the involvement of girls for this fiscal year with Sandy Saha, Programs Specialist for Council. Planning began in October of 2006 for a celebration of Rachel Carson's 100th birthday in May of 2007. Marty also registered the Occoquan Refuge as an official vendor site with the Council to enable the posting of activities, events and walks with girls in the region. A guided Ranger walk was presented each month from January through May to provide the public and scouts opportunities for learning about Carson, instilling interest in the refuge and meeting specific badge criteria. The walks were very successful and culminated in the May Birthday Celebration. Each walk had a specific theme related to the work of Carson such as the water cycle and pesticides.



Girl Scouts listening intently to Rachel Carson impersonator.

Ranger McClevey worked closely with the staff of Freedom High School in Woodbridge to provide opportunities for students. The school provided the use of its greenhouse and expertise of horticulture teacher Fred Kourmadas to grow a variety of native wildflowers from seed. These plants were utilized in refuge and local planting projects.

In FY2008, Forum Sanghavi, a Girl Scout and student at Freedom High School completed work towards a Silver Award at the Occoquan Bay NWR. Forum researched invasive plants on the refuge and coordinated a weed pull on April 25, involving Junior Scouts. She instructed the scouts in the role that invasive plants play in the loss of viable habitat and then introduced the scouts specifically to the identification of garlic mustard (*Alliaria petiolata*). The 15 scouts weeded the plant on a half acre site near Taylor Point.

3. Other Manpower Programs

In FY2007, Americorps crews were assigned to relief work in New Orleans and the Mid-West and were not available to assist with projects in this region.

In FY2008, the refuge continued its working relationship with the Woodbridge, Virginia Stake of the Church of Jesus Christ of Latter-day Saints. The local church group brought 65 teens and 13 adult helpers to the refuge to help us prepare for the annual Fall Wildlife festival. The kids painted a shed, scraped grass off pavement, cleaned the refuge van, cleaned interpretive panels and blew off roads. We were impressed with their demeanor and willingness to help out. This is the fourth year that they have volunteered their time to complete projects. The kids painted the storage shed at the Contact Station, cleaned and waxed the refuge van, washed interpretive panels, cleaned the event pavilions, rolled posters and scraped grass off of a paved parking lot.

Two AmeriCorps National Civilian Community Corps crews assisted at the Mason Neck and Occoquan Bay refuges this past year. One crew spent a week at the Occoquan on a variety of projects. The crew removed encroaching limbs from 1 mile of the wildlife drive corridor, and blew leaves off of the paved portion of the drive. Part of the crew painted the two EE storage sheds at Painted Turtle Pond and installed cabinets in the Contact Station. The crew assembled seven benches and constructed 5 wheel chair accessible gravel pads for the benches. Pads were placed on Fox, Easy and Charlie Road. Under the direct supervision of Ranger Marty McClevey, the remainder of the crew constructed 150 feet of trail to improve access for school students from the pavilion at Painted Turtle Pond to the EE study area below the pond. This project entailed removing roots and stumps from the current path and laying out a six foot wide, 5 inch deep tread of compacted recycled concrete. The Corps workers learned to use basic hand tools and were instructed in basic trail construction and maintenance.

4. Volunteer Program

On October 7, 2006, the Friends of the Potomac River Refuges provided food for a volunteer recognition luncheon. Marty McClevey the Volunteer Coordinator for the Complex hosted the recognition at which the volunteer of the year was recognized. A dozen or more volunteers attended and ate barbeque sandwiches while hour milestone awards were presented. Joanna Taylor was afforded this honor and was presented a carved bird. Her name was added to the Volunteer plaque. Joanna has made significant contributions to the MAPS banding and the Occoquan Bay migratory songbird banding programs. She has accumulated over 1000 hours of service. In this fiscal year, Volunteer Otto Swoboda reached the milestone of over 4000 hours of volunteer service. He was awarded a certificate from the Secretary of Interior. Dorothy Estep, a volunteer at the Occoquan Bay Refuge, was awarded a certificate from the Director of the Fish and Wildlife Service for accumulating over 3000 hours of volunteer service. Both have been nominated for the Take Pride in America awards program.

Patricia Wood, who has volunteered at the Complex since 1999, coordinated the youth fishing event on May 20 and under her own self directed initiative, took the event a step further by creating a fishing mentoring program called Fishing for our Future. Patricia created a curriculum to teach kids about the basics of fishing and recruited fishing enthusiasts from the region to serve as mentors. Patricia has volunteered at other events including the Eagle Festival at Mason Neck State Park. Volunteers and members of the staff attended the funeral of Patricia's mom.

Each year the Dominion Virginia power company selects a site at which to provide volunteers to complete construction projects. This year, they requested to conduct a two day project at the Occoquan Bay Refuge. On October 18 and 19, seven of their staff collected material, augured holes and planted posts for the construction of a shelter at the bird banding station. They prepared holes and posts and initial framing for the erection of a photo blind. On Tuesday October 24, 41 individuals were divided into teams of two for a day of projects: erected a trail head kiosk at main lot, constructed three benches at butterfly garden, built the banding station shelter, constructed photo blind overlooking Marumsco, built two storage sheds at painted turtle pond for the school program and fishing event equipment and to provide dedicated storage space for the biological program.



Dominion Volunteers work on projects at Occoquan Bay

ExxonMobil Corporation held its annual refuge shoreline cleanup on March of 2007 and April of 2008. At this cleanup, ExxonMobil employees and their families are invited out to help pick up litter and construction debris along the refuge shoreline. This event which has been conducted since the site was an Army facility, has been extremely fruitful for ExxonMobil and the Service. In addition to providing the volunteers, Exxon also donates a set amount of money based upon the number of employees that participate. In past years the Friends organization has received up to \$5,000.00 for the Complex through this event.



ExxonMobil volunteers working diligently along the shore!

Approximately two miles of shoreline were cleaned by more than 200 volunteers along with the entire refuge boundary from Dawson Beach Road, along the Ospreys golf course to Taylor Point. A roll-off dumpster was filled and three truckloads of material were transported to Mason Neck State Park to be placed in a dumpster provided by the Allison Ferguson Foundation. Thirteen refuge volunteers and six staff supported this event.

Volunteer Barb Marrow coordinated the recycling of plastics for the cleanup. The cleanup participants sorted the plastics from other trash. The plastics were taken to a County recycling facility.

Volunteer Coordinator Marty McClevey held monthly volunteer meetings at the Occoquan Bay Visitor Contact Station. Tailgate training was offered at these meetings on a variety of topics to enhance the knowledge and skills of volunteers. The meetings were generally well attended. McClevey also continued to publish a monthly volunteer newsletter to keep refuge volunteers and other interested groups and individuals up to date on current events, upcoming events, training, safety and specific opportunities for volunteer service. New restrictions and requirements were placed on volunteers who routinely access refuge computers and the internet. Internet security training and Privacy Act training will now be required for these individuals. In addition, background checks will be required for long term and high hour volunteers.

Volunteer Donna Rae Dean provided invaluable support by taking over some of the basic administrative functions of the volunteer program. Donna Rae, a talented lady who has traveled extensively in the US and Africa, donated a substantial amount of time in updating the volunteer database, updating volunteer agreements, formulating a meaningful rewards scheme and inputting data on a monthly basis.



Donna Rae assisting at Fall Festival

Marty created a PowerPoint presentation for volunteer orientation along with an updated volunteer training chart. Volunteers Suzanne Miller and Barb Marrow completed the AAA Defensive driving course.

In FY 2008, ExxonMobil conducted its annual cleanup on April 5. They provided 194 volunteers for the day. We had 12 refuge volunteers assist at the event driving trucks and leading work crews. Bill and Gretchen May, Rob Hartwell, Barb Mitchell, Bev Smith led work

crews. Sara Allison and John Andries served as points of contact on the shoreline to aid the workers. Scott Keller and Paul Dodd worked with Steve Boska to load trash onto trucks. Stephanie Leon and Barb Marrow hauled recyclable materials to sorting piles and to the county recycling center. Bill Wallen photographed the event.

Volunteers from the Defense Intelligence Agency Rod and Gun Club under the leadership of Bernie Gately provided invaluable assistance to our hunting program and our fishing event. Members of this club assisted with the installation of the ladder tree stands and tripod stands. During the Occoquan hunts, they served to assist with retrieving deer from the field, monitoring the hunters, set up and clean up. In May, the club assisted at the youth educational fishing event serving as mentors, issuing rods.



Mentor aides child in fishing

Two of the members Don and Jim Ridley were assigned to work with the 25 kids from Marumsco Elementary School. They were a perfect match for the class and provided the kids with an incredibly memorable day. Both have indicated an interest to come back and work with the kids for the 2009 event.

Curt Anderson, a volunteer and member of the DIA Rod and Gun Club attended basic farm tractor training at the Rappahanock Refuge in Warsaw Virginia. The course provided Curt with tractor operation and safety and now enables Curt to assist with mowing operations for the Complex. The Complex purchased steel toed boots for Curt.

A number of volunteers and organizations stood out for their contribution to the biological and public use programs. Patricia Wood, a long term volunteer, coordinated the youth fishing event for 2008. She also began assisting at the Contact Station on Saturdays. Patricia has expressed an interest in expanding her knowledge of the public use program by being afforded additional training and service opportunities.

The ExxonMobil Corporation conducted its annual cleanup on the refuge in April. Exxon has facilitated this cleanup for over 10 years. The Woodbridge Stake of the Church of Jesus Christ of Latter Day Saints has involved its youth in refuge projects for the past three years.

As noted earlier in this report, the passing of volunteer Otto Swoboda was a loss felt by the staff, and public. Otto served as a gate greeter and was well known and loved by all who visited the refuge. The staff, fellow volunteers and members of the Friends organization attended his

funeral wake. Otto received the Presidential Volunteer Service Award from President Bush for his contribution of over 6,000 hrs of service.

In fiscal year 2007, a battery powered golf cart was purchased to enable volunteers to make less intrusive patrols of the trails and to further our efforts at going green. The cart was hooked into a solar powered charge system to enable charging at the Little House maintenance shed and to further our efforts to go green.



Larry Brindza teaching at Fall Festival



Monarch Butterfly

Larry Brindza continued his monarch tagging program. Larry accumulated over 50 hrs of tagging not including his volunteer work at the Eastern Shores of Virginia National Wildlife Refuge and Fisherman's Island. Larry published a paper on the results of over 5 years of tagging in the region. Two of his tagged monarchs from 2007 were discovered at the El Rosario monarch preserve of Mexico. In Larry's words, the find of two tagged monarchs from the same location, in the same year and from the Occoquan Bay National Wildlife Refuge is equivalent to an individual winning the lottery. Larry also conducted teacher workshops, conducted monarch programs at the Complex's Fall Wildlife Festival, presented lectures on his work for the public through the friend's organization. Larry gave a presentation on the monarchs as part of formal training for Prince William County teachers. For this work, Larry has been nominated for the Volunteer of the Year in biology for 2008.

5. Funding

See Elizabeth Hartwell Mason Neck NWR – combined funding for Potomac River NWR Complex.

6. Safety

See Elizabeth Hartwell Mason Neck NWR.

7. Technical Assistance

See Elizabeth Hartwell Mason Neck NWR

8. Other Items

In May 2008, the Refuge hosted the Chainsaw Operator's Safety Course. Two Refuge Staff members, SCEP intern Michael Murray and Refuge Officer Gareth Williams, attended the

training. Individuals from Rappahannock and Back Bay National Wildlife Refuges attended the training as did a volunteer from the Bureau of Land Management.

F. HABITAT MANAGEMENT

1. General

In July, Refuge Manager Greg Weiler , STEP employee Michael Murphy, and Maintenance Mechanic Boska installed several beaver baffles to prevent beaver dams from clogging of culverts.

2. Wetlands – Nothing to Report

3. Forests – Nothing to Report

4. Croplands – Nothing to Report

5. Grasslands

In March 2007 Maintenance Mechanic Maintenance Boska began mowing areas designated in the Annual Habitat Workplan. Equipment used during the effort were the Refuge's Deere 7200 tractor and flex wing mower and the Regional hydro-axe. The hydro-axe was used in the areas of sweetgum encroachment and in areas for brush reduction. However there is still remaining evidence of the Department of the Army's Research Laboratory. Below is some debris found while mowing areas near the old control tower and testing bunker.



Blount 721 Hydro-Ax



Maintenance Worker Boska operating Hydro-Ax



Old Homesite Prior to Hydro-Ax



Old Homesite After Hydro-Ax



Debris from the Bunker Area

6. Other Habitats – Nothing to Report
7. Grazing – Nothing to Report
8. Haying – Nothing to Report
9. Fire Management – Nothing to Report
10. Pest Control

Visitor Services Specialist Marty McClevey obtained a State of Virginia Certified Pesticide Applicator's license by passing the State examination March 17, 2006. A general licensing was obtained along with certification in the category of Forestry. This certification enabled the refuge to move forward with a Pesticide Use Plan and begin the eradication of specific invasive-exotic plants as Japanese knotweed and mile-a-minute weed. McClevey conducted spraying at several locations on the refuge. Almost one acre of knotweed had become established at the homesite with a large growth of mile-a minute. This plot was sprayed in May and June with glypho-kill. Because of the extensiveness of the colony, the knotweed was not eradicated. This site will be treated in March of 2007. Other smaller colonies around the refuge were treated with similar results. Mile-a-minute was found at several new locations and is a weed of great concern. Colonies along Bayview, the homesite, and plots along Taylor road were identified and sprayed. These colonies will continue to be monitored until the plants are under control. Marty spent a great deal of time researching and ordering pesticide application spray equipment, personal protective gear and herbicides

In FY2008, Ranger McClevey maintained his pesticide applicators license and continued the complex's invasive plant eradication program. Concentrating on knotweed, mile-a-minute, beefsteak plant and stilt grass. He sprayed two acres of mile a minute between Bayview and Charlie Roads as well as several large colonies along the shore and other road locations. A large outbreak was found on Deephole Road near the gravestone site. This plant is extremely invasive and has spread rapidly over the refuge. It is uncertain as to if it is possible to control this plant.

Beefsteak, a mint, was found throughout the refuge especially along the shoreline between Catamont Creek and Charlie Road. These plants were spot treated.

Knotweed has been sprayed at various locations over the past couple years. This plant appears to be under control at this time.

A large area of Chinese lespedeza got established on the old Army compound near the tower site. This year it appeared that switch grass and Indian grass was growing in so densely that it was out-competing the lespedeza. More monitoring is needed to confirm this control.

In February, Marty organized a weed pull along Deephole Point Road near Fox to remove biomass from a phragmites colony. Four volunteers participated in this venture to cut down the tall growth. The higher than normal precipitation for the year prevented the volunteers from reaching the center of the colony. The colony was sprayed with rodeo in June but the phragmites had already grown to over seven feet in height. Next year's spraying will be conducted in the spring when the plants are producing young shoots.

Girl Scouts were recruited to facilitate a weed pull of garlic mustard on the refuge. On April 26, twenty Junior scouts weeded the mustard off of approximately one half acre near Taylor Point.

11. Water Rights – Nothing to Report

12. Wilderness and Special Areas – Nothing to Report

13. WPA Easement Monitoring – Nothing to Report

G. WILDLIFE

1. Wildlife Diversity

Over 215 species of birds, 60 species of butterflies, and numerous mammals, amphibians, reptiles, and other species inhabit the site making it one of the most varied in northern Virginia. Factors that contribute to diversity are the over 600 species of plants that have been documented, the site's location at the junction of two rivers, and the many uses the land has been put to in the past.

2. Endangered and/or Threatened Species

Bald eagles have been seen frequently using the shoreline for perching and resting. A pair of eagles was seen roosting and perching along the eastern shore during months of January through March in 2004, and this past year a pair established a territory and built a nest along the shore. On February 24, two prominent birders observed a pair of bald eagles bringing sticks to a large tulip poplar along a tidal inlet off Deephole Point Road. Further observation confirmed that the two were building a nest. The section of the Deephole Point Road and trail from the end of Fox Road to the end of Easy at Deephole Point was closed to foot traffic until it could be determined if the eagles would actually nest. The trail was reopened in May when the nest site was officially declared abandoned. Plans have been made to close the trail in December in anticipation of a further interest by the birds to nest. Gate posts will be set at each end of the trail to facilitate closing.

3. Waterfowl

The man-made pond in the compound receives constant use, primarily by pairs of Canada geese, hooded mergansers, and wood ducks. In the winter, black ducks, mallards, and wood ducks seemed to prefer the beaver impounded creek paralleling Easy Road. Ruddy ducks and lesser-and-greater scaup often raft off the southern shoreline near the mouth of Marumsco Creek. For example, during the Christmas Bird Count between 20,000 and 25,000 scaup were using the Occoquan Bay and adjacent shoreline.



Male and Female Mallards

4. Marsh and Water Birds

Historically, marsh bird surveys were conducted at Elizabeth Hartwell Mason Neck and Occoquan Bay National Wildlife Refuges in June and July of 1999 using two passive listening intervals (initially a 0-5 minute period and 1-minute final period) and in-between a broadcast response (playback) portion. Only two species of colonial waterbirds (Great Blue Heron and Great Egret) have been identified on the refuge. However, in recent years additional waterbirds have been sighted on the refuge by visitors.



Yellow-crowned night heron in marsh

5. Shorebirds, Gulls, Terns, and Allied Species

Woodcock have become very visible during the spring with peenting activity noted in all quadrants and liable to occur well into early summer. With the mild winter, some woodcock were even heard “peenting” during the Christmas bird count in January.

6. Raptors

The open expanses draw many raptors. Red-shouldered hawks utilize many of the smaller meadows fringed by trees while red-tailed hawks soar over the larger areas in competition with bald eagles and osprey.



Osprey landing on nest near parking area.

Kestrels can be seen near the main compound on light posts and the fence while harriers sweep the western half of the refuge. During the winter the Northern Harrier are common sites in the grassland areas of the refuge.

On January 11, 2007 Gareth Williams and Ranger McClevey recovered a red tailed hawk which had been hit by a vehicle on Furnace Road in Fairfax. The bird was transported to the Fairfax Animal Shelter for treatment.

7. Other Migratory Birds

An interesting observation occurred on March 28, 2007 when birders observed a sandhill crane walking on a golf green adjacent to Dawson Beach Road. The bird flew into the refuge and landed in a field along the entry road. The bird was only seen on that day. This was the first documented sighting of a sandhill crane in the Northern Virginia region.

8. Game Mammals

Spotlight counts to census the deer population were initiated in September 1998 and demonstrate an increasing population, followed by a decreasing trend in 2001 due to hemorrhagic disease and implementation of a hunt program on the refuge. (See Figure 3 and H – 9. Hunting)

9. Marine Mammals – Nothing to Report

10. Other Resident Wildlife

The number of coyote sightings on the refuge has increased. Coyote scat is regularly found along all roads.

11. Fisheries Resources – Nothing to Report

12. Wildlife Propagation and Stocking – Nothing to Report

13. Surplus Animal Disposal – Nothing to Report

14. Scientific Collections – Nothing to Report

15. Animal Control – Nothing to Report

16. Marking and Banding

In 2001 a spring (April-May) banding station was established on the refuge with cooperation and assistance of several volunteers near the mouth of the Marumsco Creek. At the banding site valuable data on resident and migratory bird species using the refuge is collected with the purpose of establishing a long-term monitoring site. Staffing for the station is totally composed of volunteers under the supervision of the refuge biologist and lead volunteer/coordinator (Suzanne Miller, a resident of Fairfax County and volunteer bird bander with the Institute for Bird Population and their MAPS project at Mason Neck). Initially, funding for the station came primarily through the biological program of Potomac River NWR, but more recently the Friends group for the refuge has taken the activities of the banding under their wing and built a storage building for the project. See attached Table for summary of all the birds banded on the refuge.



Volunteer banding a bird

Name	CODE	2003	2004	2005	2006	2007	2008
		Band	Band	Band	Band	Band	Band
Spotted Sandpiper	SPSA					1	2
Mourning Dove	MODO					1	2
<i>US F&WS, FoPRR Fall Festival</i>	<i>MODO</i>					5	3

Yellow-billed Cuckoo	YBCU					1	
Red-bellied Woodpecker	RBWO	1	3	1	4		4
Downy Woodpecker	DOWO	2	4	4	5	1	3
Hairy Woodpecker	HAWO	1	2		1	1	3
Northern Flicker	YSFL		2		1		1
Pileated Woodpecker	PIWO		1	1	1		
Eastern Wood-Pewee	EAWP		1	5			2
Acadian Flycatcher	ACFL	1		3	4	1	3
Alder/Willow Flycatcher	TRFL			6	5		18
Eastern Phoebe	EAPH	1	1	4		2	9
Great-crested Flycatcher	GCFL		1	1			1
Eastern Kingbird	EAKI		1	1	2	1	1
White-eyed Vireo	WEVI		2		1	5	5
Warbling Vireo	WAVI			3	1		
Philadelphia Vireo	PHVI		1				
Red-eyed Vireo	REVI	2	2		3	3	2
Blue Jay	BLJA		7	4	1	1	2
Tree Swallow	TRES	2		2		1	
N. Rough-winged Swallow	NRWS	2		1		2	
Carolina Chickadee	CACH	4	1	4	3	4	2
<i>US F&WS, FoPRR Fall Festival</i>	<i>CACH</i>		<i>1</i>				
Tufted Titmouse	ETTI	3	5	2	4	5	3
<i>US F&WS, FoPRR Fall Festival</i>	<i>ETTI</i>				4		
White-breasted Nuthatch	WBNU		1		1	3	1
Brown Creeper	BRCR		1		3		8
Carolina Wren	CARW	6	11	7	9	4	11
<i>US F&WS, FoPRR Fall Festival</i>	<i>CARW</i>			4			
House Wren	HOWR		2		1		3
Winter Wren	WIWR			1	2	4	2
Marsh Wren	MAWR						
Golden-crowned Kinglet	GCKI		1			3	8
<i>US F&WS, FoPRR Fall Festival</i>	<i>GCKI</i>		<i>1</i>				
Ruby-crowned Kinglet	RCKI	4	3	9	5	7	1
<i>US F&WS, FoPRR Fall Festival</i>	<i>RCKI</i>		3		4		
Blue-gray Gnatcatcher	BGGN	6	4	4	5	5	9
Eastern Bluebird	EABL		2	3	5		4
Veery	VEER	3	1	1	7	2	5

Gray-cheeked Thrush	GCTH	1	3		6	2	3
Swainson's Thrush	SWTH	3	2	10	9	7	11
Hermit Thrush	HETH	1	2			5	3
Wood Thrush	WOTH	1				3	3
Gray Catbird	GRCA	15	39	27	38	78	55
<i>US F&WS FoPRR Fall Festival</i>	<i>GRCA</i>				<i>1</i>		
Northern Mockingbird	NOMO	3	1	1			1
<i>US F&WS FoPRR Fall Festival</i>	<i>NOMO</i>		<i>1</i>				
Brown Thrasher	BRTH	4	8	7	6	5	6
<i>US F&WS FoPRR Fall Festival</i>	<i>BRTH</i>				<i>1</i>		
Cedar Waxwing	CEDW			1	3		2
European Starling	EUST	3	1		1	1	
Blue-winged Warbler	BWWA						1
Northern Parula	NOPA	2	1		1	1	1
Yellow Warbler	YWAR	4	4	6	8	11	10
Chestnut-sided Warbler	CSWA	1					1
Magnolia Warbler	MAWA	3		5			2
Black-throated Blue W.	BTBW	2	1	1	4	4	2
Yellow-rumped (Myrtle)	MYWA	57	48	35	95	121	80
<i>US F&WS FoPRR Fall Festival</i>	<i>MYWA</i>		3				
Black-throated Green W.	BTNW				1		
Prairie Warbler	PRAW						2
Palm Warbler (Yellow)	YPWA	4	5	12	32	10	10
<i>Palm Warbler (Yellow)</i>	<i>YPWA</i>					<i>1</i>	
Palm Warbler (Western)	WPWA	1					
Blackpoll Warbler	BLPW	6	2	41	13	8	8
Black and White Warbler	BAWW	1		1	1	2	
American Redstart	AMRE	1		5	2	2	10
Prothonotary Warbler	PROW	5	3	3	4	3	7
Worm-eating Warbler	WEWA						1
Ovenbird	OVEN		1	2		3	1
Northern Waterthrush	NOWA	17	14	31	58	20	24
Mourning Warbler	MOWA			1		2	5
Common Yellowthroat	COYE	64	43	48	108	77	102
<i>Common Yellowthroat</i>	<i>COYE</i>					<i>1</i>	
Hooded Warbler	HOWA					2	
Wilson's Warbler	WIWA			1	2	1	2

Canada Warbler	CAWA	1		4	1	2	1
Yellow-breasted Chat	YBCH	2		2	5	3	4
Scarlet Tanager	SCTA						
Eastern Towhee	EATO	1	14	10	10	18	13
Chipping Sparrow	CHSP	3			1		
Field Sparrow	FISP	7	7	7	7	4	14
Savannah Sparrow	SAVS						1
Fox Sparrow	FOSP					1	
Song Sparrow	SOSP	5	14	26	18	27	58
<i>US F&WS FoPRR Fall Festival</i>	<i>SOSP</i>		2	1	1		
Lincoln Sparrow	LISP		2	1	1		6
Swamp Sparrow	SWSP	8	7	12	16	30	22
White-throated Sparrow	WTSP	29	66	59	76	99	117
<i>US F&WS FoPRR Fall Festival</i>	<i>WTSP</i>				2		
White-crowned Sparrow	WCSP						
Dark-eyed Junco	SCJU				1		1
American Robin	AMRO	1	1	1	3	4	3
Northern Cardinal	NOCA	15	16	23	37	23	22
<i>US F&WS FoPRR Fall Festival</i>	<i>NOCA</i>		1			2	
Blue Grosbeak	BLGR	1	1		1	1	
Indigo Bunting	INBU	4	6	5	5	6	5
Red-winged Blackbird	RWBL	8	27	31	42	32	18
Rusty Blackbird	RUBL	1			1		
Common Grackle	COGR	9	36	29	35	10	9
Brown-headed Cowbird	BHCO	4	4	1	5	6	16
Orchard Oriole	OROR	11	7	4	5	4	5
Baltimore Oriole	BAOR	5	1	3	5		1
House Finch	HOFI	3					
American Goldfinch	AMGO	3	8	14	10	19	20

	2003	2004	2005	2006	2007	2008
Number of Species per year	55	57	57	63	61	72
Number of birds per year	358	467	542	764	724	807
Species to-date:	72	78	81	83	87	89
Banded to-date:	1228	1695	2237	3001	3725	4532

Name	Code	2003	2004	2005	2006	2007	2008
Netted but not banded:							
Ruby-throated Hummingbird	RTHU	2	5	3	10	7	9
Northern Bobwhite				1			
Spotted Sandpiper				1	1		
Green Heron							1
Fish		1					
Frog				1			
CrayFish					1		

17. Disease Prevention and Control

See Elizabeth Hartwell Mason Neck NWR – G.17 Disease Prevention and Control

H. PUBLIC USE

1. General

100th Birthday of Rachel Carson.

A Carson birthday celebration took place on May 5th, 2007. The event was geared to Girl Scouts from the region and had the theme, “Make the World a Better Place- Rachel Carson”. Planning for the event began in October of 2006 when Council Program Specialist Sandy Saha, Specialist Karen Brown and Marty McClevey met to discuss options for such a celebration. Actress Kate Campbell Stevenson from Washington D.C. was hired to portray Rachel Carson.



Actress Kate Campbell Stevenson

Junior Scouts were invited to participate and work on completing the requirements for the Water Works Wonders badge. Troops and girls were invited to prepare posters for the event. We had 6 stations on site for the girls to attend. The banding station was kept open until 3 PM to accommodate the girls. Rain started at around 11:30 and continued the rest of the day. Sixty-six Junior Girls participated, 21 adults, 10 Senior Scouts helpers, 6 bird banders, 9 presenters along with refuge volunteers Otto Swoboda, Dorothy Estep, Paul Dodd, Bill Wallen, Donna Rae Dean. This totaled 117 participants and helpers. We used all of our pop up tents and two 10x20 event tents. The day ran from 9 AM to 3 PM and included 5 specific stations of hands on activities with a 6th station at the central pavilion where the talented actress Kate Campbell Stevenson provide two performances of the life of Rachel Carson. The girls and staff were very impressed

by the phenomenal performance of Kate Stevenson. The girls were treated to cake and the singing of happy birthday to Rachel Carson. At the end of the day we managed to pull up all of the tables and small pop-up tents. Two large tents remained on site for removal by the staff later in the week. High winds from a front moving through overnight blew the two tents into the fields damaging the pipe frames and tearing the canopies. The staff managed to salvage most of the pipe sections.

The Connecting People with Nature initiative was introduced by the Region. Richard Louv's book *The Last Child in the Woods* has been instrumental in bringing about awareness to land managing agencies, educators and Congress related to the "nature deficit disorder" in children. It is recognized that children who actively explore nature are healthier and better adapted.

The refuge staff attended a special Rachel Carson dramatic presentation by actress Kilani Lee at the Patuxent National Research Refuge.

The Friends of the Potomac River Refuges hosted the third annual Fall Festival in October of 2006 and 2007.



TR Bear meets and greets visitors



The Raptor Conservancy wows the crowd

The days were spectacular with peak visitation around 1 PM. Ranger McClevey working with volunteers John Mahoney, Dennis Toole and Dave MacDonald spent the day finding parking spaces for the hundreds of cars. Overflow parking extended down the entry road on the left side approximately a quarter mile from the main lot. The auxiliary parking area near Lake Drive was filled to capacity and volunteer, staff and vendors were parked at the Little House maintenance shed. Activities at the event included a photo workshop by volunteer Bill Wallen. This is a well attended program. Steve Boska, Stephanie Leon, and Michael Murray coordinated the wagon rides. The wagon tours were scheduled on the hour and provided visitors with a narrated tour along Easy Road to Deephole Point, west along the shore of the Occoquan Bay to Fox Road and returning to the festival site. Each ride accommodated 30 people. Volunteer Larry Brindza set up a display on the monarch butterfly. John Mahoney and his daughter created a monarch butterfly on a sheet of plywood. With a hole cut in the panel for the head, kids and adults enjoyed having their photo taken as a butterfly. Prince William Conservation Alliance began to plan wetland plants in the pond adjacent to the parking lot, encouraging visitors to help out. Both years yielded great feedback and visitors alike.

The public use program at Occoquan continues to evolve and advance. In July of 2008 the refuge celebrated its 10th anniversary as a Wildlife Refuge and part of the National Wildlife

Refuge System. Since 1998 the refuge staff and associated organizations have transitioned the site from a former Army base to a public site at which visitors are afforded the opportunity to view wildlife, learn about the concepts of refuge management as well as the mission of the U.S. Fish and Wildlife Service and Refuge System.

In 1999, the staff coordinated the demolition of the large Army buildings and associated infrastructure. Girl Scouts worked along side members of Audubon and refuge staff to open trails, stabilize shoreline roads and remove debris, while learning about wetlands and grassland management. Girl Scouts are still a viable partner.

ExxonMobil conducted annual cleanups before the site was a refuge and continues to be a huge partner in our efforts to remove the tons of manmade debris and trash that floats ashore annually.

In 2003, the refuge celebrated the Centennial of the Refuge System by completing the restoration of the 10 acre Army compound site, opening up most of the gravel roads to the public, opening the wildlife drive and opening the Visitor Contact Station. Interpretive signs and waysides have been added along with a recreation fee program. Collected entrance fees are used to enhance the public use programming. Permanent restroom structures were added at the main parking lot and Painted Turtle Pond along with two large pavilions from which events, programs and student learning can be conducted. Boardwalks were installed on the wetland site below Painted Turtle Pond to provide a safe and less impacting means of facilitating wetland studies for local schools. The refuge fostered a partnership with Prince William County Schools which rejuvenated the E.A.G.L.E.S. center at Belmont Elementary School and now provides Freedom High School with access to volunteer opportunities and a site for fostering advanced science studies. This fiscal year, 3,000 middle school students visited the refuge to learn about watersheds and the value of wetlands. This past year we conducted our 7th annual youth fishing event. This May event is one of our most popular events and has served as a valuable outreach to youth and the local community.

A partnership with the Virginia Department of Game and Inland Fisheries has provided the State with a site to conduct a Generations Hunt youth hunt to promote hunting as a heritage activity. The refuge conducts annual lottery hunts as a means of reducing the white-tailed deer herd.

We thank our partners, fellow State and Federal agencies and our Friends organization for making the Occoquan Bay National Wildlife Refuge a viable site for wildlife and education.

In FY 2008, the annual refuge visitation as estimated through the use of a pneumatic hose counter located on the entry road was 19,611.

2. Outdoor Classrooms - Students

Joy Greene, program coordinator for the E.A.G.L.E.S. center (at the Belmont Elementary School) worked closely with Ranger McClevey to implement the new **Wonders of Watersheds** experience, curriculum and outdoor studies program for 6th grade students in Prince William. On Jan 24, 2007 Ranger McClevey had the first meeting with Joy Greene the EAGFLES center program coordinator. Joy discussed the possibility of using the refuge to bring 6th grade students for a meaningful Chesapeake Bay study. She proposed a pilot program to bring 4 middle schools over the course of 16 days. The program was accepted. From March 20 through May 8, 2007, 1040 students participated in this program. The following middle schools participated in the program:

Woodbridge Middle
Saunders Middle School
Porter Middle School
Fred Lynn Middle School
Rippon Middle School

Thomas Jefferson High School, a Governor's School in Fairfax, Virginia, obtained a special use permit to bring 140 students to the refuge to conduct wetland studies at 4 sites.

On June 5, 2008, Ranger Marty McClevey represented the staff and management of the Complex by attending a partnership Prince William commitment and recognition ceremony at Belmont Elementary School. A partnership agreement was drafted and signed by McClevey which enables the school system and the Occoquan Bay National Wildlife Refuge to cooperate in education programs and initiatives for both students and teachers. This partnership has been ongoing for the past two years specifically through the relationship between the refuge and the Eastern Area Grounds for Learning and Environmental Science or E.A.G.L.E.S Center located at Belmont Elementary School and run by Joy Greene and Freedom High School as facilitated by Dr. LouEllen Brademan. The agreement states that teachers and students will be afforded all opportunities to participate in education, biology and instruction on site. Since the partnership was established in 2004, 2 to 3000 middle school students have been able to participate in watershed and water quality programming at the refuge's Painted Turtle Pond environmental education facility. Joy Greene, the Coordinator for the E.A.G.L.E.S. Center has been the driving force behind maintaining the partnership with the refuge and facilitating the site visits by these students.

On Friday May 2, 2008 Ranger Marty McClevey facilitated a visit with Living Classrooms- D.C. for their annual American Shad release. Six schools from D.C. and Fairfax County participated in the release- 117 students and 35 teachers and adult chaperones. The sandy beach area near Taylor Point was selected because of its easy access for the students to conduct the release.

Thousands of minute and transparent fry were raised in schools during the previous week, transported in coolers and released off of Dawson's Beach near Taylor Point on the refuge. Lisa Moss, a fisheries biologist from Harrison Lake Fish Hatchery monitored the release and provided instruction for the kids. Jeanette O'Connor and Sandy Burk provided the leadership and direction from Living Classrooms. Though the local media did not cover our release, two D.C. network stations did run clips on the evening and late night news of releases that took place at other sites. After the release, Marty McClevey led a school group for a birding and plant tour.

On June 24, 2008 45 students and 5 teachers from the Fredericksburg, James Monroe governor's school visited the Occoquan Refuge to conduct environmental education and participate in a tour. Ranger McClevey led them on a 1 hour tour from parking lot to pond and talked about refuge management, invasive plants and forest succession.

Marty McClevey conducted a special program for a mixed age 4H club from western Prince William County. The group leadership requested a Ranger guided program of a minimum of two hours on topics such as tree identification and general nature study. McClevey met with sixteen youth and four adults, leading them from the parking lot pavilion on a circuit to Deephole Point and returning by way of Fox Road. The students were extremely interested and offered to return to assist with specific projects.

3. Outdoor Classrooms-Teachers

The E.A.G.L.E.S. center offered opportunities for teachers to obtain environmental education skills on the site. Joy Greene coordinated a monarch butterfly study program with the aid of volunteer Larry Brindza, a monarch researcher. Twelve teachers participated in the program which was filmed by the Prince William County Schools Media Resources Office for a segment in the Monarch Live national schools broadcast.

As part of the Partnership Prince William initiative, the refuge afforded opportunities for teachers to participate in summer workshops. On July 6, 2008, the refuge hosted a workshop for 8 teachers in wetland studies at Painted Turtle Pond. On July 14, Volunteer Larry Brindza led a tour for fifteen Prince William teachers participating in a Monarch Butterfly educational seminar. The Prince William County media center filmed this tour to be incorporated into a Monarch Live web broadcast to be aired in October of 2008.

On February 12, 2008, Marty McClevey participated in a Science Expo for K-12 science teachers at the Prince William County Administrative Center. Marty displayed photographs of activities and events geared toward connecting children and nature and provided information on how teachers can participate in future programs. Katy Doyle a teacher from Marumsco Hills Elementary School was extremely interested in opportunities to bring her third grade students out to the refuge to fish. Arrangements were made for 25 kids from her class to attend the May Youth Fishing Event. A school bus brought the kids to the event and mentors were assigned to the group. The youth had an outstanding time and the school will be afforded the opportunity to bring the kids out in 2009. This is an example of successful outreach where the needs of teachers and students are explored and addressed.

Martha Nudel, the Service's Outreach Coordinator, sent refuges copies of a Public Service Announcement for airing on local cable and television stations. The P.S.A. contains a message on getting nature into your kids with an emphasis on going to a local wildlife refuge. Marty McClevey coordinated with Martha to have copies sent to the Prince William media center to air on the County's school network. The program, a one minute P.S.A. was aired from May through September, eight times a day.

4. Interpretive Foot Trails

We installed the 2 x 3 foot fiberglass embedment panel interpreting the refuge's Army history. Designed by Ranger McClevey, this panel, placed on a knoll on Bayview Drive overlooking the old Army facility provides an aerial view of the entire site with the communications towers and electromagnetic test facilities still intact. The panel interprets the name changes; East Coast Radio Transmitting Station, Woodbridge Research Facility and Harry Diamond Laboratory along with the how the uses of the facility changed through the years. Mr. Todd Waltmeyer, former cultural resources manager for the Army site provided the electronic emblems of the Army Material Command and the Harry Diamond Lab, for inclusion on the panel.

The Dominion Virginia Power volunteers installed a trail head kiosk at the main parking lot. This kiosk has a bulletin board and a 3 x 3 foot space for an interpretive panel or map.

On March 17, 2007, Volunteers Joan Patterson and Annette Baker-Toole spread gravel and lopped saplings from the path to the environmental education boardwalks. This activity provided a safer path for the middle school students to access the wetland study site. During the week of July 28 thru Aug 1, 2008, the Americorp Team, Badger 2, a group of 10, assisted the Refuge Staff with a number of projects at Occoquan Bay NWR. The group assembled and installed ten benches. The benches are for visitor use on the more than three miles of trails at the Refuge. The group constructed several gravel pads used as platforms for the benches. The team also installed cabinets in the Visitor Contact Station, painted trim on sheds used for environmental education supplies, trimmed limbs and vegetation along portions of Wildlife Drive and constructed a trail leading to the Environmental Education Platforms located near the marsh at Painted Turtle pond.



Americorp Team Badger 2 assembling benches.

5. Interpretive Tour Routes

Marty McClevey worked with Otto Swoboda and Dorothy Estep to install the satellite parking sign across from the Visitor Contact Station.

6. Interpretive Exhibits and Demonstrations

The Welcome interpretive panel was installed at the satellite lot along with a redwood brochure box. A design for a 3x3 interpretive trail map was submitted to a contractor for fabrication. This map will be installed at the trail head at the main parking lot.

Marty McClevey and volunteer Patricia Wood participated in the Prince William County Fair on July 13 by setting up a children's activity at the 4H Barn. They conducted a program on identifying animal tracks and showed the kids how to make plaster casts of tracks. A sand box was used with a set of rubberized animal track molds from which to create tracks for casting. They worked from 3 PM to 9 PM and greeted over 200 kids at the event. This was the first time that the refuge has participated in the fair and is definitely a practical means of providing information on our refuges to families from the area.

On April 10 the refuge staff was invited to participate in the dedication of the Merrimac Farm Wildlife Management Area located in Prince William County near the Quantico Marine Base.

7. Other Interpretive Programs

Ranger McClevey conducted monthly interpretive walks from January through May geared towards youth and the 100th birthday of Rachel Carson. Program themes included: water cycle, refuge management and use of pesticides, birding basics, invasive plants.

On May 9, 2007, Reporter Matt Brock of Channel 7 WJLA out of Washington, D.C., visited the refuge to present a segment on the banding station for the Good Morning Washington program. Ranger Marty McClevey, Friends' President Annette Bake-Toole and Refuge Manager Greg Weiler accompanied Mr. Brock at the station. Volunteers Suzanne Miller and Joanna Taylor were actually featured in the segment as they retrieved birds from the nets.

On January 6, 2007 Ranger McClevey facilitated a planning meeting for the Rachel Carson birthday celebration event. Sandy Saha, Program Specialist with the Girl Scout Council of the Nation's Capital and Karen Brown, retired Program Specialist, Cindy Millard a Girl Scout leader and Volunteers Bev Smith, Joan Patterson, Patricia Wood and Annette Baker-Toole participated in this planning meeting.

On January 27, McClevey hosted the first of a series of monthly ranger walks focused at Girl Scouts and leading up to a signature event for the 100th birthday celebration of Rachel Carson in May.

On Saturday May 5th 2007, we hosted a Rachel Carson birthday celebration at the Occoquan Bay Refuge. The event theme was Make the World a Better Place- Rachel Carson. Planning for this event began in October of 2006 when GS program Specialist Sandy Saha, Karen Brown and Marty McClevey met to discuss options for such a celebration. Actress Kate Campbell Stevenson from Wash DC was hired to portray Rachel Carson. Junior Girl scouts were invited to participate and work on what water wonders badge. Troops and girls were invited to prepare posters for the event. We had 6 stations on site for the girls to attend. The banding station was kept open until 3 to accommodate the girls. Rain started at around 1130 and continued the rest of the day. 66 Junior Girls participated, 21 adults, 10 Senior helpers, 6 banders, 9 presenters, along with refuge volunteers Otto Swoboda, Dorothy Estep, Paul Dodd, Bill Wallen and Donna Rae Dean. A Total of 117 participants and helpers. We used all of our pop up tents and two 10x20 event tents. At the end of the day we managed to put up all of the tables and tents except for the two large tents. High winds came in over night with a front and damaged the two tents on Sunday morning.

Ranger McClevey joined the Local Environmental Education Partners and participated in monthly meetings to plan cooperative events and partnerships.

Volunteer Patricia Wood coordinated the preplanning and coordination of the annual educational fishing event. Anglers from the previous year were sent reminders for the event and announcements were posted in the Potomac News newspaper. A planning meeting was held on February 17 attended by Ms. Wood, Fisheries Biologist Bob Pos and volunteer John Dutton.

On Saturday May 19, 2007, the sixth annual educational fishing event for kids was held at the Occoquan Bay National Wildlife Refuge. The event targeted youth age 5-15 years. The event site was a 2 ½ acre pond on the southwest portion of the refuge.

On May 18, refuge staff and four volunteers staged canopies, tables and chairs and completed final site preparations. Mowing and maintenance work was completed by Thursday the 17th.

Patricia Wood, the volunteer event coordinator, arrived around 0700 and began coordinating set up. Volunteers started to arrive around 0800 with the majority checked in between 0830 and 0845. Marty McClevey, Park Ranger, coordinated setup and traffic control.

Volunteers started registering kids at 0900 and continued to 1400. Fifty-two kids participated. Donna Rae Dean and Patricia Wood, staffed the registration area from 0800-1400.

Bill Mitchell, a refuge volunteer provided a commercial quality hotdog cooker and took care of food services.

Members of the Defense Intelligence Agency Rod and Gun Club assisted at the event by helping kids fish. Eight members of this organization participated.

Wal*Mart donated a \$500.00 gift card to cover food, drinks and prizes. We anticipated a larger attendance this year and increased the quantity of water and hotdogs. Food was served around 1140. Each registered angler was given a circus ticket for a dog and bag of chips.

Refuge volunteers, Dennis Toole, Patricia Wood and Assistant Manager Daffny Jones Hoskie used Polaroid cameras to take photos of the kids as they fished or after they had caught a fish. The Polaroid photos were laid out at the registration table to show off the success of the kids. Each child was given a photo, a certificate for participating in the event and a goody bag filled with a variety of fishing information, tackle, creel bag, and fish measuring tape, hooks and lures. Wal*Mart donated 10 packs of film.

Prize drawings were made each hour which included a couple of tackle boxes and ten Zebco 202 rod and reels.

Fifty-two kids participated in the fishing event. Most of these kids stayed for 3 hours. The majority of these kids had pre-registered for the event. Eighty percent caught a fish. The event was catch and release.

We estimate the in addition to the 52 kids, approximately 30 individual (parents, family members and visitors) attended the event. Entry gate visitation log indicated 283 people visited the refuge on the day of the event between 0800 and 1700 hrs.

Volunteers from DIA Rod and Gun Club (8), the Friends Organization (1), the US Fish and Wildlife Service – Arlington (1- Bob Poss), Refuge Volunteers (9), assisted with registration, traffic control, assisting kids with fishing and serving food. (Three staff and twenty-six volunteers)

The Volunteer sign-in log indicated 15 volunteers donated 85 hours at an average of 5.2 hours per person. Wal*Mart (local store) contributed a \$500.00 gift card to be used for prizes and food (200 hotdogs and buns). An anonymous donor contributed a variety of prize items, 2 cases of

water and 6 cases of coke products: \$50.00 Approximately \$50.00 in materials donated by the Virginia Department of Game and Inland Fisheries were used this year which included guides, creel bags and coloring books: \$50.00

Total contributions of food, prizes and materials: \$600.00

Total volunteer hour contributions: \$1,530

Highlight of day: Bob Poss, fisheries biologist from Region 9 indicated that the success rate was exceptional and he observed that 80% of the kids caught a fish. The weather was spectacular for the event. One child who was in a wheel chair because of a broken leg, used our new ramp, lowered rail on the dock. She caught one of the largest fish and won a Zebco rod and reel in the prize drawing.

In FY2008, Marty McClevey was an active member of Local Environmental Education Partners or LEEP. He provided assistance to other partners and published 3 articles to the "On the Wild Side" column of the Potomac News, the local newspaper. Marty wrote an article on invasive plants, journaling and the common yellowthroat.

The Friends of the Potomac River Refuges applied for a Nature of Learning grant through the Fish and Wildlife Foundation. A proposal to conduct interpretive and environmental education programs on the refuge was submitted with a grant request of \$9,000. They proposed conducting monthly programs on Saturday mornings. Joy Greene, a member of the Interpretation and Environmental Education committee for the Friends, wrote the grant and worked closely with refuge staff to determine refuge needs and address refuge concerns.

On Saturday May 17, 2008, the seventh annual educational fishing event for kids was held at the Occoquan Bay National Wildlife Refuge. On May 16, refuge staff staged canopies, tables and chairs and completed final site preparations including a shopping trip to Wal*Mart. Mowing and maintenance work was completed by Thursday the 15th.

Patricia Wood, the volunteer event coordinator, arrived around 0700 and began to set up registration. Volunteers started to arrive around 0800 with the majority checked in between 0830 and 0845. Marty McClevey, Park Ranger, coordinated setup and traffic control.

Volunteers started registering kids at 0850 and continued to 1400. Seventy-seven kids participated. Donna Rae Dean who normally coordinates registration was unable to attend this year's event. Patricia Wood, staffed the registration area from 0800-1400.

Bill Mitchell, a refuge volunteer provided a commercial quality hotdog cooker and took care of food services with Barb Marrow.

Members of the Defense Intelligence Agency Rod and Gun Club assisted at the event by helping kids fish. Ten members of this organization participated. Boy Scout Troop 2215 assisted at the event. Under the leadership of Scout Master Bow Rose, 3 scouts and Assistant Scout Master Steve Marriot provided support with rod and reel and worm distribution. Three scouts assisted fishing instructor/mentors as on site helpers.

Lisa Moss, fisheries biologist, set up a creel census station at the event to obtain data on large mouth bass. This effort followed an electro-shocking effort earlier in the year to obtain a better understanding of species in the pond. She was assisted by a high school student from Freedom

High in Woodbridge. The consensus from her work and that of the fishing mentors was that the fish were not biting as well as in past events but the bass caught were immature fish averaging 8 inches. Lisa was pleased at the number and overall health of these bass.



Lisa Moss, Bob Poss, and Two Refuge Volunteers Electro-shocking the Pond

Marty McClevey promoted the event at a Prince William School Science expo. A teacher from Marumsc Hills Elementary School, contacted at this event, arranged to bring her entire third grade class. A school bus provided transportation for these kids to the event from their school. Seventeen kids and ten adult chaperones attended. We arranged for this group to be mentored by experienced anglers. The comments from the kids and adults indicated that they had an absolutely fantastic day out. Most of these kids were from low income, ethnic backgrounds. Most had never fished before. We recognized that this group represented the target audience for the event.

Wal*Mart donated a \$500.00 gift card to cover food, drinks and prizes. We anticipated a larger attendance this year and increased the quantity of water and hotdogs. Food was served around 1140. Each registered angler was given a circus ticket for a dog, drink and bag of chips.

Refuge volunteers, Dennis Toole and Joan Patterson, helped Assistant Manager Daffny Jones Hoskie with photography. Now that the film for Polaroid cameras is no longer available, digital cameras were purchased to take photos of the kids as they fished or after they had caught a fish. Daffny utilized a photo printer dock to print out the photos on site. The finished photos were laid out at the registration table to show off the success of the kids.

Each child was given a photo, a certificate for participating in the event and a goody bag filled with a variety of fishing information, tackle, creel bag, and a pair of sunglasses. The sunglasses are a new addition for the event. We purchased these to promote eye safety (we encouraged the kids to wear them and most did) and to promote the refuge (Fishing for our Future printed on one side and Occoquan Bay National Wildlife Refuge printed on the other side). Prize drawings were made each hour for Zebco 202 rod and reel sets. We decided from previous events that providing fishing gear was a better option for a prize than the variety of related fishing gear that we generally gave away. A mobility impaired toilet unit was rented for the event at a cost of \$125.00. Thirty boxes of trout worms were purchased for the event.

Seventy-seven kids participated in the fishing event. Most of these kids stayed for 3 hours. The majority of these kids had pre-registered for the event. Eighty percent caught a fish. The event was catch and release.



Young Girl is excited about catching a fish

We estimate that in addition to the 77 kids, approximately 40 individuals (parents, family members and visitors) attended the event.

Volunteers from DIA Rod and Gun Club- 10 , Boy Scout Troop 2215- 8 ,the Friends Organization- 1, the US Fish and Wildlife Service –7 including Bob Poss (Arlington) and Lisa Moss (Harrison Lake), Refuge Volunteers-10, assisted with registration, traffic control, assisting kids with fishing and serving food.

The Volunteer sign-in log indicated 30 volunteers donated 148.5 hours at an average of 4.95 hours per person. This equates to a volunteer time donation of \$2,787.34 (based upon 2007 volunteer value of \$18.77/hr). Wal*Mart (local store) contributed a \$500.00 gift card to be used for prizes and food (200 hotdogs and buns). Approximately \$50.00 in materials donated by the Virginia Department of Game and Inland Fisheries were used this year which included guides, creel bags and coloring books.

Total contributions of food, prizes and materials: \$550.00

Total volunteer hour contributions: \$2,787.34

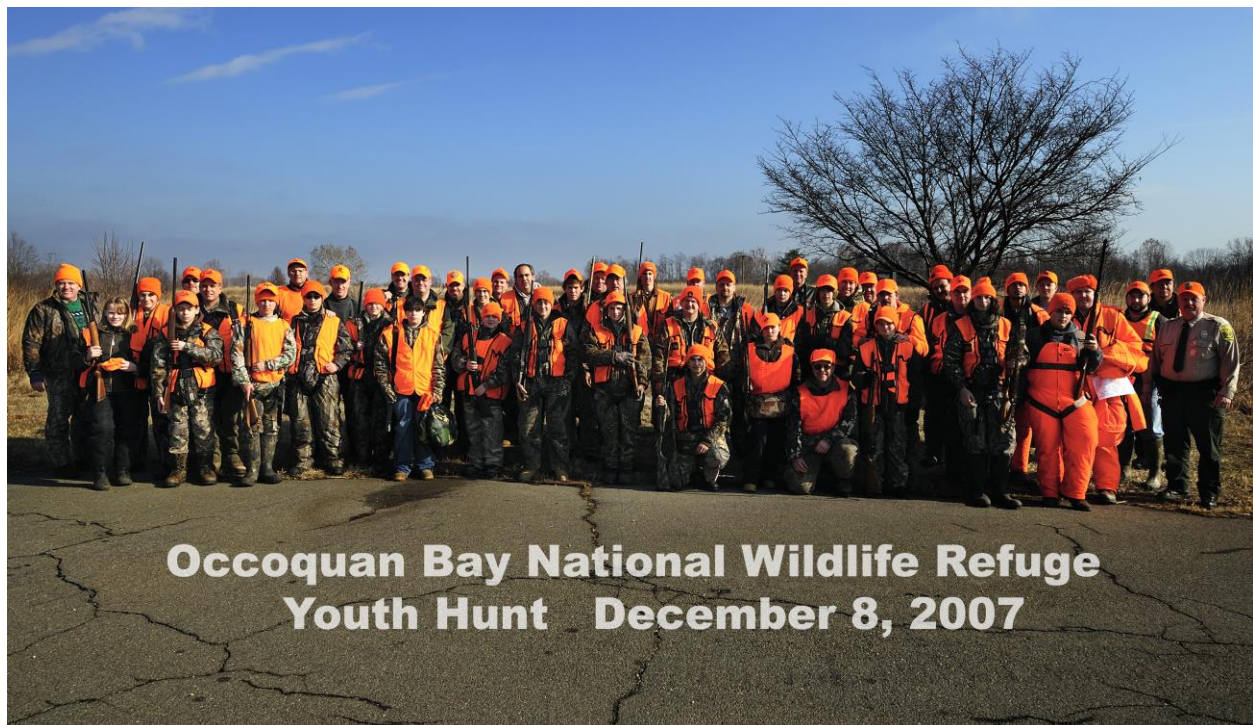
Highlight of day: Prince William County school teacher Katy Doyle brought most of her 3rd grade class to the event. She coordinated their visit and worked hard to ensure the kids had a safe and memorable visit.

8. Hunting

Marty McClevey attended the State Hunter Safety Course in Fauquier County on December 9 and 10, 2006. The course was extremely beneficial in providing background information on hunting and required laws related to firearms and bow.

Regional State Game Biologist Dan Lovelace assisted staff with the placement of hunt stands on the refuge. Additional stands were purchased in this fiscal year to provide additional stand sites and to begin the replacement process of aging stands. New hunt ladder and tripod stands were purchased to supplement the current stands. On April 7 Bernie Gately and Gareth Williams organized the removal of tripod and ladder stands on the refuge. Seven volunteers removed the stands in about 2 hrs.

Occoquan hunts 21 youth with parent, 23 hunters day 1 and 23 day two. The Complex continued to partner with the Virginia Department of Game and Inland Fisheries to host a youth deer hunt. The hunt, dubbed by the State as the Generations Hunt, provides youth age 12 to 16 years with advanced hunter instruction and time on the refuge to test their skill at harvesting deer from a hunt stand. On December 2 the youth hunt took place on the refuge. The 21 selected youth were given 3 hours of classroom instruction prior to being stationed with their dad or an adult in stands on the refuge. On this day six deer were taken by the youth. Member of the Defense Intelligence Agency Rod and Gun Club supported the hunt. President Bernie Gately expressed the continuing commitment by the Club in this venture.



On December 5, 2006, the second day of hunting took place for lottery hunters. Twenty hunters participated on 20 stands. Bernie Gately, Kurt Anderson, Don Ridley, Dick VandHei and Bud Braddock, all members of the Defense Intelligence Agency Rod and Gun Club assisted for the day. Volunteer Bill Mitchell assisted with deer check. On December 6, the third day of hunting took place with 20 stands occupied and 16 deer taken. On Monday, January 22, 2007 the refuge

facilitated its first late season deer hunt. Seventeen standby hunters selected through the lottery process hunted. Five individuals selected for the day did not show up for the hunt.

White-tailed deer management hunts were conducted at the Occoquan Refuge in December of 2007 and January 2008. An additional day was added in January to increase the opportunity to reach management objectives. On December 8, the State Department of Game and Inland Fisheries hosted an opportunity for youth to learn the basics of deer hunting. This special hunt known as a Generations Hunt involved the teaching and mentoring of young hunters in a classroom setting followed by an afternoon of hunting on the refuge. Twenty-two slots for a youth with a mentor or parent were selected. Twenty-one hunters participated in the hunt. The refuge staff assisted at the hunt by providing the use of the hunt stands and facilities and any other necessary service to ensure a successful hunt. Members of the DIA Rod and Gun Club assisted at the hunt.



Youth Hunter and Father pictured with buck taken on refuge

On Monday and Tuesday of the following week, the refuge hosted hunting for pre-selected hunters. The hunts began at 6 AM and continued until sundown. Twenty-two hunting slots were selected for each day. A fourth day took place on January 12. On this day, 17 hunters and 9 standby hunters participated in the hunt. This day was afforded the Complex in cooperation with the State, outside the designated hunting season. This was the first Occoquan hunt in which standby hunters, hunters who had participated in the first two lottery hunt days, were allowed to return and fill in slots vacated by designated hunters.

12/8/07 – 21 youth, 21 mentors

12/10/07 - 18 hunters

12/11/07- 19 hunters

1/12/08 - 17 hunters and 9 standbys

9. Fishing – Nothing to Report

10. Trapping – Nothing to Report

11. Wildlife Observation

A photo blind was constructed along the Marumsco Creek by volunteers from Dominion Virginia Power.

12. Other Wildlife Dependent Recreation – Nothing to Report

13. Camping – Nothing to Report

14. Picnicking – Nothing to Report

15. Off-Road Vehicling – Nothing to Report

16. Other Non-Wildlife Dependent Recreation – Nothing to Report

17. Law Enforcement

On May 23, 2007 as Ranger McClevey was working in the Visitor Contact Station, a man driving into the refuge blacked out from a diabetic disorder, struck the entry gate, and drove over the embankment to adjacent to the entry booth. The man who was diagnosed as suffering from a lack of insulin was given sugar by the medical responders. He was not injured in the crash and was driven home by a relative. The gate sustained damage to rollers and the main framework was bent. An insurance payment enabled the gate to be replaced and placed in service.

Occoquan Bay NWR, although generally a quieter spot off of Dawson Beach Rd. in Woodbridge, VA, is not without its share of problems. In FY 2007, refuge law enforcement handled a diverse number of incidents. Occoquan Bay is not far from a busy section of Route 1. Numerous complaints began coming in from refuge volunteers and staff about a few women in particular, that regularly visited the refuge with different male partners. Refuge law enforcement conducted surveillance and soon took care of at least two different women that were regular prostitutes of Woodbridge. Other sex offenses were dealt with throughout the year in the main parking lot and along the refuge's wildlife drive.

Despite the many restrooms that are provided on the refuge, refuge law enforcement deals each year with a few cases of improper disposal of human waste, involving some of our lazier visitors.

As Occoquan Bay sits directly along the shores of the Potomac River and trail access leads directly to the river, fishing is a constant enforcement issue. Fishing is not allowed on the refuge, aside from the one youth fishing day that Occoquan Bay hosts. Numerous violations for fishing along the refuge shorelines and in refuge ponds were encountered.

Urbanization around the refuge raises the likelihood of incidents involving motor vehicles and Occoquan had a few. Aside from minor violations, such as illegal parking and speeding on the entry road, violations were encountered by refuge law enforcement including operating with a suspended license, expired registration and trespassing on the refuge interior roads with a vehicle. A couple of accidents were handled by refuge law enforcement as well. See pictures

below. The first involved a man who had a diabetic seizure as he was coming through the refuge entry gate and caused him to wipe out the main gate (\$5,000) and a couple of refuge signs. The other was a Prince William county bus driver who backed into a parked car outside of the refuge visitor contact station.



MVA - Destroyed Main Gate and Signs



PWC Bus Accident at Occoquan Bay

Hunting concerns are not absent at Occoquan Bay, as with many refuges. During the very busy waterfowl season on the Potomac River, refuge law enforcement encountered issues involving not having proper licenses or federal duck stamps, to a group that was caught trespassing and illegally hunting waterfowl in Marumsco Creek. Appropriate measures were taken with the violators. Occoquan Bay also hosts controlled whitetail deer hunts on the refuge and although

extremely regulated at this refuge, a few minor violations were encountered, mostly violating refuge specific regulations.

Geocaching's popularity has soared internationally over the last number of years and refuges provide the perfect environment or setting to participate. However, geocaching is not allowed on the refuge, as it is not deemed an acceptable use and folks are prohibited from leaving the hiking trails. Refuge law enforcement has removed two geocaching sites and one letterboxing site on the refuge in FY 2007.



Geocaching Site in Closed Area at OB

Occoquan Bay also had lessening problems in FY 2008 after a productive 2007 with law enforcement. Numerous minor problems did continue with trespassing concerns in wildlife sensitive closed areas, visitors ignoring the posted restrictions on dogs in the refuge, failing to pay the refuge entrance fee on an honor system and not being able to resist the temptation of jogging or bicycling on refuge trails.

Refuge law enforcement dealt again with shoreline fishing issues and fishing without the required state license at Occoquan Bay. It seems that although the fishing restrictions are posted, the temptation of easy access to the Potomac River shoreline is too great at times.

Minor traffic issues continued with illegal parking, speeding along the refuge entry road and driving the wrong way down the one-way wildlife drive to name a few. Boats trespassing past the newly posted channel signs into Marumsco Creek were a problem as well.

Three illegal bucks were also killed during the refuge hunts, and again, the hunters were fined and the meat was donated to Virginia's Hunters for the Hungry program.

18. Cooperating Associations – Nothing to Report

I. EQUIPMENT AND FACILITIES

1. New Construction

In October 2006, employees from Dominion Virginia Power volunteered several days to complete numerous projects on the Refuge. Volunteers assembled and erected a kiosk purchased by the Friends of Potomac River Refuges. The volunteer group also constructed a bird blind, osprey platform, and two storage sheds.

2. Rehabilitation – Nothing to Report

3. Major Maintenance

In November 2007, the heat pump, located in the Visitor Contact Station, required repairs. Service technicians replaced the circuit board, blower motor, and squirrel cage fan.

In December 2007, the water heater at the Visitor Contact Station rusted through. Contractors installed the replacement heater.

4. Equipment Utilization and Replacement

In November 2007 the Refuge received a Columbia Summit Utility Vehicle. This vehicle is electric powered special utility vehicle. A solar system in place at the Refuge will charge the six 12 volt batteries that power the unit.



Columbia Summit Utility Vehicle

5. Communication Systems

See Elizabeth Hartwell Mason Neck NWR: I.5 – Communication Systems

6. Computer Systems

See Elizabeth Hartwell Mason Neck NWR: E.7 – Technical Assistance

7. Energy Conservation

The Refuge purchased eight recycling stations for use within the Refuge. Refuge Staff placed the recycling stations at parking lots, near buildings, and along trail routes.



Volunteer Paul Dodd and SCEP Mike Murray assemble Recycling Stations

8. Other

In September 2007, Tropical Storm Hanna dumped more than 7 inches of rain in some areas. While winds were light, minimal damage occurred at the Refuge. A large tree fell on the perimeter fence along Taylor Point Road.



Fence Along Taylor Point Road

J. OTHER ITEMS

1. Cooperative Programs

McClevey assisted the Prince William County Service Authority in planning the first annual Veterans Park cleanup. Marty provide the leadership with planning materials and assignment descriptions use to facilitate the ExxonMobil cleanup. All ideas and suggestions were incorporated into this event. Manger Greg Weiler participated in the cleanup as the refuge representative. In 2009, the Authority plans to conduct the second annual cleanup.

Ranger McClevey coordinated the preservation of the historic Martin Scarlet stones now on loan to the Rippon Lodge. Marty worked with Heather Hembrey, Preservationist with the Historic Preservation Department of Prince William County, to seek the professional restoration help of Howard Wellman of Wellman Conservation LLC to stabilize the stones from future frost cracking. The refuge paid \$1,500 for half of the services and Prince William County historic preservation office paid for the other half. The stones are on long term loan with the county for display at Rippon. The Martin Scarlet stone and the table stone believed to be that of his son's were treated with an infusion of grout and adhesive. This restoration work was a great accomplishment through partnerships.

The refuge's museum collections were audited by KPMG Audit Services. Drew Rosen visited the refuge on September 25, 2008 and requested that Ranger McClevey provide documentation on specific items in the museum collection. The firm was satisfied with the files and documentation and the physical presence of the artifacts. It appears that the Service and Region 5 was specifically targeted for an audit this year.

2. Other Economical Uses – Nothing to Report

3. Items of Interest – Nothing to Report

4. Credits – Nothing to Report

K. FEEDBACK – Nothing to Report

FEATHERSTONE NATIONAL WILDLIFE REFUGE

Woodbridge, Virginia

INTRODUCTION

Featherstone National Wildlife Refuge is an unmanned station and is located 4 miles southwest of Mason Neck at the mouth of Neabsco Creek where it joins the Potomac River. The refuge is approximately 22 miles from Washington, D.C., in Prince William County, Virginia.

Acquired in 1979 from the District of Columbia, Featherstone NWR was originally proposed to be one of a 17 unit Potomac Estuary National Wildlife Refuge Complex. No additional Federal acquisitions were made after this plan was proposed in 1970 except Marumsco NWR until 1998. The additional land was added to Marumsco NWR, creating Occoquan Bay NWR. This addition changed Elizabeth Hartwell Mason Neck National Wildlife Refuge and its satellites (Featherstone and Marumsco NWR) into a complex.

Featherstone NWR contains 325 acres of woodland and freshwater tidal marsh along the northern shore and mouth of Neabsco Creek and north around Featherstone Point along Occoquan Bay. Topography is almost entirely flat on the east side with patches of bottom land hardwoods and tidal marsh. The Richmond, Fredericksburg and Potomac Railroad bisects the Refuge from north to south with built up elevations of 80 feet separating the east from the west with its series of sharply incised peninsulas. An abandoned railroad grade also traverses the Refuge, impacting the refuge with the compacted roadbed, castoff slag and coal from early train use, and channeling some of the drainage into vernal pools and swamps. Farm Creek passes through the northeastern portion of the Refuge before draining into Occoquan Bay and the Potomac River.

Official access is by two meandering right-of-ways, neither of which is accessible to vehicles. The staff utilize the commuter rail station built next to the refuge as a way to cross the tracks and gain quicker access to the refuge as an improvement of when they use to walk the tracks to get to the refuge without having to cross creeks and vernal unauthorized activity does occur. Refuge staff have received various reports of illegal hunting, trapping, and camping. Staff visits have been able to confirm presence of such activity but not the level due to poor accessibility and limited staff time.

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A. HIGHLIGHTS



Featherstone NWR during cold conditions

B. CLIMATIC CONDITIONS

See Elizabeth Hartwell Mason Neck NWR for details.

C. LAND ACQUISITION

1. Fee Title – Nothing to Report
2. Easements – Nothing to Report
3. Other – Nothing to Report

D. PLANNING

1. Master Plan – Nothing to Report
2. Management Plan – Nothing to Report
3. Public Participation – Nothing to Report
4. Compliance with Environmental Mandates – Nothing to Report

5. Research and Investigations – Nothing to Report

6. Other

In January 2008, Refuge Manager Weiler, Park Ranger McClevey, Maintenance Mechanic Boska, Volunteer Paul Dodd along with staff from Prince William County Environmental Services Division removed a rusted, abandoned, and junked early 1960's Buick from the Refuge. The vehicle had been an “eyesore” to nearby residents to the Refuge.



Refuge Staff Secure the Buick



Buick Removal



Buick Being Loader

E. ADMINISTRATION

1. Personnel

See Elizabeth Hartwell Mason Neck NWR

2. Youth Programs – Nothing to Report

3. Other Manpower Programs

The Friends of the Potomac River Refuges and Prince William County Soil and Water District worked together with the refuge to conduct a cleanup along the creek and access road of the refuge.



Featherstone Access Road



Volunteers lending a helping hand

4. Volunteer Program – Nothing to Report

5. Funding – See Elizabeth Hartwell Mason Neck

6. Safety – Nothing to Report
7. Technically Assistance – Nothing to Report
8. Other Items – Nothing to Report

F. HABITAT MANAGEMENT

1. General

Featherstone Refuge presently consists of 325 acres of which 80 acres are forested upland, 220 acres are palustrine wetland, and 25 acres are open water. This area is a tidally influence freshwater wetland. The portions of “Hidden Lake”, the main portion of Farm Creek running through the refuge was at one time diked, presumably for fisheries management in the late 1800's or early 1900's. This dike has deteriorated to a few pilings in the water and short earthen section that is no barrier to water, wildlife, or boaters.

2. Wetlands

The forested wetland sections of the refuge are comprised of red maple, sweetgum, yellow poplar and water willow. Emergent marsh is located mainly on the southern section of the property.

3. Forests

The pockets of upland forest scattered throughout the refuge are at or near climax stage and are comprised mostly of mixed oak species with Virginia and loblolly pine. In most areas there is little ground cover. Areas bordering Neabsco Creek consist of steep slopes with an understory of mountain laurel.

4. Croplands – Nothing to Report
5. Grasslands – Nothing to Report
6. Other Habitats – Nothing to Report
7. Grazing – Nothing to Report
8. Haying – Nothing to Report
9. Fire Management – Nothing to Report
10. Pest Control – Nothing to Report
11. Water Rights – Nothing to Report
12. Wilderness and Special Areas – Nothing to Report
13. WPA Easement Monitoring – Nothing to Report

G. WILDLIFE

1. Wildlife Diversity

The refuge provides important wintering and nesting habitat for waterfowl, wading birds and shorebirds. Wintering and migrating waterfowl include black duck, mallard, blue-winged teal, wood duck, hooded merganser, green-winged teal, gadwall, and lesser scaup. The dense and diverse marsh vegetation attracts many wading birds including great blue heron, great egret and double-crested cormorants. Osprey, red-tailed and red shouldered hawks, northern harrier, kestrel, and Cooper's hawks have all used the Refuge.

2. Endangered and/or Threatened Species

Bald eagles are frequently observed using the refuge. The shoreline provides important feeding and perching habitat. The pair that nested on Featherstone initially nested in the swamp area between the railroad tracks and the river just above the mouth of Neabsco Creek. They moved the next year to a chestnut oak on the third peninsula in from the railroad bridge, and after three years moved west, possibly onto the neighboring developer's land and then back out to near the first site. Their last several locations were not productive and their current status is unknown.

3. Waterfowl – Nothing to Report

4. Marsh and Water Birds

Great blue herons are commonly seen on Featherstone Refuge. Other birds in this group which utilize the refuge include egrets and double-crested cormorants.

5. Shorebirds, gulls, Terns, and Allied Species

Due to the dense vegetation, mostly forest, the most likely places to observe species in this group is just off the refuge in the waters of the Occoquan Bay and Potomac River. Mudflats exposed at low tide are high in fine sediments and anaerobic, producing little vegetation or fauna to attract birds for feeding and unattractive for loafing.

6. Raptors

Osprey, red-tailed and red-shouldered hawks, northern harrier, kestrel, and Coopers hawks have been recorded on the refuge.

7. Other Migratory Birds

A special use permit was issued for both fiscal years to a concerned citizen wanting to install and maintain nest boxes on the refuge due to the closeness in proximity to other locations/properties where he already had nest boxes up and in use.

8. Game Mammals

White-tailed deer, red fox, raccoon, gray squirrel, and beaver all use the refuge.

9. Marine Mammals – Nothing to Report

10. Other Resident Wildlife – Nothing to Report
11. Fisheries Resources – Nothing to Report
12. Wildlife Propagation and Stocking – Nothing to Report
13. Surplus Animal Disposal – Nothing to Report
14. Scientific Collections – Nothing to Report
15. Animal Control – Nothing to Report
16. Marking and Banding – Nothing to Report
17. Disease Prevention and Control – Nothing to Report

H. PUBLIC USE

1. General – Nothing to Report
2. Outdoor Classrooms – Students – Nothing to Report
3. Outdoor Classrooms – Teachers – Nothing to Report
4. Interpretive Foot Trails – Nothing to Report
5. Interpretive Tour Routes – Nothing to Report
6. Interpretive Exhibits and Demonstrations – Nothing to Report
7. Other Interpretive Programs – Nothing to Report
8. Hunting – Nothing to Report
9. Fishing – Nothing to Report
10. Trapping – Nothing to Report
11. Wildlife Observation – Nothing to Report
12. Other Wildlife Oriented Recreation – Nothing to Report
13. Camping – Nothing to Report
14. Picnicking – Nothing to Report
15. Off-Road Vehicling – Nothing to Report

16. Other Non-Wildlife Oriented Recreation – Nothing to Report

17. Law Enforcement

Featherstone NWR is the Potomac River NWR Complex's smallest refuge at only 325 acres, but had more violations and incidents than both Mason Neck and Occoquan Bay combined, including four times as many violation notices issued in FY 2007.

Bordered by the Potomac River along its eastern side and a huge industrial park along its western side, it is a very secluded and hard place to get to. Featherstone NWR is closed to all public entry and is posted accordingly. Refuge staff does not maintain any trails for public use, however, well worn paths have been created by the large numbers of violators that have trespassed on the refuge over the years. FY 2007 would keep refuge law enforcement busy throughout the year.

The most common violation at Featherstone NWR involved trespassing of varied types. Trespassing by foot, bicycle, ATV and truck all occurred. The ATV and truck trespass did the most damage to the refuge with trail damage and erosion.



ATV Erosion at Featherstone NWR

The off road use of Featherstone also involved the violators cutting down trees for access and littering of beer cans and other trash. Refuge law enforcement soon realized how big a problem trash would become on the refuge.

Dumping incidents were common throughout the year along the north access road of the refuge. A one-way in, one-way out road that is only about ¼ mile long before reaching an impassible creek, saw numerous dumping incidents from yard debris to couches, car batteries to household garbage.



Posts dumped at Farm Creek, April 2007



Yard Debris dumped across Farm Creek

One of the most common issues at Featherstone was the temptation of access to the Potomac River shoreline for fishing opportunities. Large populations of Hispanics inhabit northern Virginia with some fishing the river for subsistence. Some do not care about rules or regulations of the refuge or what damage they cause to the resource. Numerous violations were encountered by refuge law enforcement with Hispanics in the refuge, who accounted for approximately 80% of the people contacted illegally in the refuge. Violations such as littering, illegal fires, destroying trees for firewood, being drunk in public and fishing without a required state license were all encountered. Numerous violation notices were issued for all of these incidents.



Illegally taken fish from Featherstone

From what refuge law enforcement observed during their first year at Featherstone, poaching or illegal hunting has been prevalent over the years. Numerous illegal treestands were found throughout the refuge and other general sign of past hunting activity.



Illegal Hang-On Treestand in refuge

Some stands were found that were constructed out of natural wood from trees that had been cut down and destroyed on the refuge.



Illegal Treestand on the refuge

In December of FY 2007, refuge law enforcement made the case against two deer poachers on Featherstone. Working in conjunction with the VA Conservation Police, refuge law enforcement encountered two men who had illegally killed a 9 pt. buck on the refuge and were caught dragging it out towards the industrial park. Both men were charged with and pled guilty to trespassing, possession of a firearm, discharging a firearm, illegally killing a deer, failing to wear any hunter orange and failing to notch their hunting license before moving the animal. Both men were found guilty in District Court and received hefty fines, a year of supervised probation and loss of their hunting privileges in the state of Virginia for one year. The word was beginning to get out that Featherstone NWR was a place for violators to avoid.



Seized shotguns from deer poachers



Illegal 9 pt. buck killed on refuge

As with 2007, Featherstone NWR took the top prize as a magnet for problems. Trespass continued to be the most common problem in the refuge, followed closely by numerous cases of dumping and litter. See below.



Dumping at Featherstone, 3-22-08



Dumping at Featherstone, 9-12-08



Dumping at Featherstone, 10-01-08



Trash left by trespassers, June '08

Refuge law enforcement was able to issue violation notices to some of these dumping violators and get the refuge cleaned up. Dumping will be one of the focuses for Featherstone in 2009.

Along with dumping concerns, trespassers of the refuge for illegal fishing access were notorious for leaving trash behind and generally damaging the refuge.

Off roading issues continued to be a problem as well, with one Jeep getting stuck along the refuge boundary and abandoned.



Abandoned Jeep along refuge boundary

Physical damage to the refuge occurs during these off-roading incidents as well, such as trees being cut down for access and general trail wear and erosion from use.



Trees destroyed by trespassers

Refuge law enforcement also assisted the Prince William County PD on a case, when a stolen pickup truck from a local Enterprise rental company got stuck in the refuge and was torched. The county had the vehicle removed and damage to the refuge, thankfully, was minimal.

18. Cooperating Associations – Nothing to Report

I. EQUIPMENT AND FACILITIES

1. New Construction - Nothing to Report
2. Rehabilitation – Nothing to Report
3. Major Maintenance – Nothing to Report
4. Equipment Utilization and Replacement – Nothing to Report
5. Communication Systems – Nothing to Report
6. Computer Systems

See Elizabeth Hartwell Mason Neck NWR: E.7 – Technical Assistance

7. Energy Conservation – Nothing to Report
8. Other – Nothing to Report

J. OTHER ITEMS

1. Cooperative Programs – Nothing to Report
2. Other Economic Uses – Nothing to Report
3. Items of Interest – Nothing to Report
4. Credits

Everyone on the staff contributed to the writing of this report. Manager Weiler reviewed and signed it. Refuge Staff and Refuge Volunteers Bill Wallen and Cindy Kretikos contributed the pictures.

K. FEEDBACK – Nothing to Report